03130-1

RECRUITING TRENDS 1984-85

A Study of 658 Businesses, Industries, Governmental Agencies, and Educational Institutions Employing New College Graduates

by

John D. Shingleton
Director of Placement

and

L. Patrick Scheetz, Ph.D.
Assistant Director of Placement

Michigan State University
Placement Services
East Lansing, Michigan 48824

ACKOWLEDGEMENTS

MSU Placement Services greatly appreciates the time and effort expended by employers when responding to this Recruiting Trends survey for 1984-85. We recognize that collecting and recording data for this research poses a burden on already heavy schedules. We extend a special thanks to those employers who completed and returned our questionnaire so promptly. Because of your efforts, we can continue to provide information on trends in hiring new college graduates by organizations in business, industry, government and education.

We wish to thank Mr. Ed Fitzpatrick, Mr. Tony Rogalski, Ms. Rebecca Jost, Ms. Vernicka Biles, Dr. Jim Bowling, Ms. Carolyn Diamond, and Ms. Pat Anderson, assistant directors on our staff, who helped to develop new questions and identify current trends. Ms. Karen Nelson, also an assistant director, helped with these tasks and also advised us on editing of the final report.

Moreover, this report could not have been completed without the fine efforts of our excellent clerical staff. Mary LeFevre, Karen VanAtta, Andrew Chiplock, Juli Buysee, Cindi Bauers, and Jes Asmussen assisted us with the collection of necessary data and preparation of the final report.

For all who participated in compilation of this report, we say thank you.

John D. Shingleton

Dr. L. Patrick Scheetz

Copyright: November 30, 1984
Michigan State University

Price: $10.00

Summary of
RECRUITING TRENDS 1984-85
A Study of 658 Businesses, Industries,
Governmental Agencies, and
Educational Institutions Employing
New College Graduates

This is a summary of the 14th annual Recruiting Trends survey for 1984-85. Once again, Placement Services at Michigan State University has surveyed a cross-section of employers from business, industry, government, and education; this year 658 organizations responded. The results of this survey include information regarding anticipated changes in hiring trends for new college graduates, anticipated starting salaries, campus recruiting activities, new recruitment techniques, and many other topics of interest to personnel directors, placement officers, career counselors, faculty, and students.

JOB OUTLOOK FOR GRADUATES OF 1984-85

Continued improvement is reflected in the job market for college graduates receiving degrees in 1984-85. Employers indicate that hiring quotas in their organizations have increased by 9.2% for bachelor's degree graduates. For women and minority graduates, quotas have increased by 7.7% and 10.2%, respectively. MBA graduates and master's degree graduates can expect an increase in quotas of approximately 2.7%, and doctoral degree graduates can expect a quota increase of 0.7%. (Page 14)

When questioned about the numbers of new graduates to be hired by their organizations during 1984-85, 499 employers reported an anticipated goal of 66,500. This compares to last year's actual hires of 60,076, an increase of 10.7%. Each of these organizations actually hired anywhere from 1 to 5,500 new college graduates last year. Of the employers responding to this question, 84 indicated that no new college graduates were hired last year by their organizations; and 83 employers expected to hire none this year. (Pages 10 and 11)

Job market demand will vary greatly, depending on the academic majors of the new graduates. The greatest increases in demand will be for electrical engineers (+8.1%), mechanical engineers (+5.1%), computer science majors (+5.0%), accountants (+3.8%) and general business administration majors (+3.0%). Other majors experiencing increase in demand will be chemical engineers (+2.5%), marketing majors (+2.2%), metallurgy and material science majors (+1.9%), personnel administration majors (+1.9%); mathematics majors (+1.8%), civil engineers (+1.7%), and packaging majors (+1.6%).

Slight increases in demand are expected for finance majors (+1.2%); hotel, restaurant and institutional management majors (+1.1%); chemistry majors (+0.8%); education majors (+0.6%); and communications majors (+0.4%).

Declines in the job market are expected for the following: retailing majors (-0.7%); physics majors (-0.8%); agriculture and natural resources majors (-1.0%); social science majors (-1.2%); petroleum engineers (-1.3%); human ecology majors (-1.4%); geology majors (-1.4%); and liberal arts/arts and letters majors (-1.5%). (Page 16)

Expected Starting Salary Offers

Starting salary offers for 1984-85 college graduates are expected to increase again this year, up 3.7% for bachelor's degree graduates. This compares with an increase last year of 2.8% for bachelor's graduates. For women graduates, an increase of 3.4% is expected, and minorities can anticipate an increase of 3.6%.

MBA graduates and those with master's degrees can expect starting salary increases for this year of 3.3%, while those graduates with doctoral degrees can expect an approximate increase of 2.9%. These figures compare to last year's increases of 2.5% for MBA and master's degree graduates and 1.8% for doctoral degree graduates. (Page 22)

Salary offers will vary according to the academic majors of graduates. The highest starting salaries are expected for: electrical engineers at $28,086; metallurgy/material science majors at $28,012; mechanical engineers at $28,004; chemical engineers at $27,827; and computer science majors at $26,690.

Other starting salaries will include the following: physics majors at $25,411; packaging engineers at $23,358; civil engineers at $22,789; mathematics majors at $20,630; financial administration majors at $19,506; accounting majors at $19,262; and marketing/sales majors at $19,157.

Graduates in other majors should expect lower starting salaries than more technically trained graduates. The following starting salaries are expected for these graduates: general business administration majors at $17,782; social science majors at $17,640; personnel administration majors at $17,181; education majors at $17,082; hotel, restaurant and institutional management majors at $16,871; agriculture and natural resources majors at $16,658; communication at $16,299; arts and letters majors at $15,124; human ecology majors at $14,827.

Besides academic fields of study, degree levels will also influence starting salary offers. This year, bachelor's degree graduates in all disciplines are expected to average $20,470, an increase of 3.7% from last year's average; master's degree candidates an average of $24,656, up 3.3%; and doctoral degree recipients $26,808, up 2.9%.

Only four factors influenced calculations of starting salary offers for new college graduates according to organizations surveyed for this research. "Almost always" influencing starting salaries were degree levels achieved and past work experiences. "Sometimes" influencing starting salary offers were academic majors of graduates and starting salary statistics from other organizations. (Page 50)

Although 64% of the employers reported that starting salary offers were "seldom" or "never" negotiable, another 36% of the employers reported that their starting salary offers were negotiable: 3% always, 5% almost always, and 29% sometimes. (Page 49)

Outlook Varies by Type of Organizations

The job outlook for new college graduates will vary depending on type of organization. Most organizations rated their employment outlook as "good," but those with a rating of only "fair" included agribusiness, building construction and manufacturing, and government agencies. (Page 42)

According to the employers responding to this survey, the greatest increases in hiring for bachelor's degree graduates will be in petroleum and allied products (+23.5%); hotels, motels and recreational facilities (+21.8%); automotive and mechanical equipment companies (+17.6%); electrical machinery and equipment companies (+15.5%); chemicals, drugs and allied products (+13.5%); public utilities including transportation (+12.6%); accounting firms (+11.5%); conglomerates (+11.1%); electronics and instruments (+9.9%); banking, finance and insurance (+9.8%); restaurants, food and beverage processing (+6.6%); and merchandising and retail services (+6.6%).

Those organizations with moderate increases in the job market will include construction and building manufacturers (+8.5%); aerospace and component organizations (+8.0%); educational institutions (+7.0%); agribusiness (+4.1%); governmental agencies (+3.7%); metal and metal products (+2.2%); research and consulting firms (+1.4%); service and volunteer organizations (+1.3%); and hospitals and health services (+1.0%).

Expected to remain about the same will be communications, radio, TV and newspaper organizations (0.0%) and military services (0.0%).

Those organizations with declining job markets include glass, paper, packaging and allied products (-2.0%) and tire & rubber products companies (-3.3%). (Page 18)

Job Opportunities Differ by Geographical Region

According to employers responding to this survey, the best availability of jobs for college graduates during 1984-85 will be in the southwest region (California, Nevada, Hawaii, New Mexico, Arizona, etc.) of the United States. Next best on the list was the southcentral region (Texas, Oklahoma, Idaho, Kansas, Louisiana, etc.) followed by the southeastern region (Florida, Georgia, Virginia, North Carolina, South Carolina, etc.).

It should be noted, however, that the job market in these regions has evidently improved slightly over last year since higher percentages of employers rated these regions with "high" or "extremely high" availability of jobs. The following ratings were received this year: southwest (48%), southcentral (40%), and southeast (39%). Last year, these regions received lower ratings: southwest (42%), southcentral (30%), and southeast (32%). (Page 35)

The next best geographical area for jobs was the northeast (Maine, Massachusetts, Connecticut, Delaware, Rhode Island, etc.), then the northcentral region (Michigan, Minnesota, Illinois, etc.), and finally the northwest region (Alaska, Washington, Oregon, Montana, Utah, etc.). (Page 35)

Best Sources of Job Leads

When new college graduates are preparing their job campaigns, it is helpful to know sources that might help them find their new employment. For this reason, a question was posed to employers regarding sources of their new college hires.

According to these employers, 44.6% of their new hires were obtained from on-campus interviews; 11.5% from write-ins; 9.0% from want-ads; 8.1% from job listings with placement offices; 6.7% from current employee referrals; and 2.8% from part-time employment.

Percentages from other sources were: 6.9% from walk-ins; 4.4% from career programs for high demand majors; 3.8% from college faculty/staff referrals; 3.8% from cooperative education programs; 3.6% from internship programs; 3.1% from summer employment; 2.9% from job listings with employment agencies; 2.2% from unsolicited referrals from placement offices; 1.8% from minority career programs; 1.5% from referrals from campus organizations; 1.1% from womens career programs.

Selection Criteria Used by Employers

Many graduating students inquire about factors considered by prospective employers when choosing individuals for plant visits after campus interviews. According to employers responding to this survey, the most important factors were attitude toward the work ethic, stated career goals and career options, academic majors, oral communication skills, written communication skills, previous work experiences, aggressiveness and assertiveness, enthusiasm and confidence, technical knowledge, motivation to achieve, and initiative. Also on the list and receiving "high" ratings were common sense and leadership abilities. The only factor receiving a rating of "medium" importance was management skills. (page 34)

In recent years, grade point averages have been used more predominantly among employers as a measure of quality when hiring college graduates. For this reason, a question about class standing of new hires was relevant.

According to the surveyed employers, 48.6% of their college hires were ranked in the top 20% of their graduating classes. Another 28.9% were ranked in the 20 to 29% range. The remainder of college hires were obtained at and below the 30th percentile of their graduating classes. Only 26.5% of new hires come from the bottom half of their graduating classes. (Page 38)

Employers Responding This Year

Responses to this year's Recruiting Trends survey were received from 658 employers representing business, industry, governmental agencies, and educational institutions. Of the respondents, 79.9% were businesses and industries; 15.7% educational institutions; and 5.2% governmental agencies and military services. Organizations with 10,000 or more employees were represented by 11.9% of the respondents, those with five to ten thousand employees were 7.3% of the respondents, and organizations with a thousand to five thousand employees represented 29.5% of the respondents. Representing organizations with five hundred to a thousand employees were 117 respondents (17.8%), those with one hundred to four hundred ninety-nine employees were 151 respondents (23.0%), and those with one to ninety-nine employees were represented by 70 employers (10.6%).

These numbers reflect the fact that data from employers of all sizes and all types are included in this research effort. (Page 3)

This year, employers expect to increase the numbers of salaried employees working for their organizations by approximately 3.5%. This compares with an expected increase of 2.3% reported by employers responding to last year's

survey. From these data, a healthy, but moderate, increase in numbers of salaried employees can be expected. (Page 7)

Anticipating the greatest increases in salaried employees were electronics and instruments industries (12.1%) and electrical machinery and equipment organizations (7.9%). These were followed closely by increases for banking, finance and insurance companies (6.8%); food, beverage processing and restaurants (5.2%); hotels, motels, and recreational facilities (4.4%); metals and metal products (4.3%); accounting firms (3.9%); research and consulting organizations (3.4%); petroleum and allied products (3.3%); and aerospace and component organizations (2.6%); and diversified conglomerates (2.9%).

Those expecting no increases or even slight declines in salaried employees were tire and rubber products companies (0.0%), public utilities including transportation (-0.1%), and hospitals and health services (-0.1%). (Page 9)

Although numbers of salaried employees working for surveyed organizations increased by an average of 1.5% last year (1983-84), responses varied greatly among organizations. For instance, decreases in numbers of salaried employees occurred in communications, radio, television, and newspaper publishing (-3.8%); glass, paper, packaging and allied products (-2.6%); petroleum and allied products (-2.3%); public utilities including transportation (-1.5%); agribusiness industries (-1.2%); metals and metal products (-0.3%); and banking and finance and insurance companies (-0.1%). (Page 6)

Measures of Recruiting Effectiveness

What factors are used by employers when measuring the effectiveness of their campus recruiting? Knowing this information might help college placement offices provide more effective services.

According to surveyed employers, their most important concerns were numbers of previous hires from a university, academic majors offered at the college or university, quality of graduates, types of graduates, success of previous recruiting, and numbers of positions available. These factors were "almost always" important measures.

"Sometimes" influencing employers' decisions to recruit on college campuses were: numbers of graduates interviewed, numbers of referrals from interviews, prestige of college or university, numbers of graduating students, proximity of college to organization, efficiency of placement office, availability of minority graduates, availability of female graduates, funds available for recruiting, available recruiting staff, and available time for recruiting. Seldom included as a factor was the total number of students on a college campus. (Page 45)

One more measure of recruiting effectiveness in the surveyed organizations was the percentage of new college graduates interviewed on campuses and hired by that organization. According to surveyed employers, 13.3% of those interviewed on campuses last year were hired. The most prevalent answers were 10% (89 organizations), 5% (57 organizations), and 20% (33 organizations). (Page 28)

Another measure of recruiting effectiveness was the percent of jobs offered and accepted by new college graduates. For new technical college graduates recruited last year (1983-84), surveyed employers reported that 59.0% of their offers of employment were accepted. This compares to the previous year's rate of 60.1%, a decrease in acceptance rate. This slight change in rate, if at

all significant, may be an indication that the job market for technical college graduates is improving slightly. (Page 12)

Offers of employment to non-technical college graduates were accepted at the rate of 68.5% last year (1983-84). This compares to an acceptance rate of 65.3% in (1982-83). Acceptance rates for technical and non-technical graduates as well as changes in acceptance rates from 1982-83 to 1983-84, may tend to indicate a slight improvement in the market for technical college graduates and a continued erosion in the job market for non-technical graduates. (Page 13)

Employers report that a moderate increase is expected in numbers of interview schedules on college campuses this year (+7.4%). Although employers have increased their quotas by 9.2%, they expect to secure more new hires from just a few more campus interviews. (Page 19 and 21)

Another fairly accurate measure of trends in the job market for new college graduates is the number of campus interview schedules cancelled because of declining personnel needs. According to these employers, 94 organizations cancelled interview schedules because of declining needs for new employees last year (1983-84), a cancellation rate of 6.9%. This compares with 160 employers who cancelled schedules during 1982-83 and responded to the Recruiting Trends questionnaire last year. (Page 29)

When advising new college graduates on trends in the job market, it is helpful to know the percents of new professional hires who are new college graduates as well as those who are experienced individuals. According to the surveyed employers, 41.7% of last year's hires were new college graduates, while 46.3% were experienced individuals with college degrees. (Page 36)

New Recruitment Techniques

An interesting shift noted in this year's Recruiting Trends survey was the identification of new recruiting techniques. For example, in recent years, prescreening on college campuses has become a more prevalent recruiting technique. According to employers responding to this year's survey, 338 organizations (69.2%) expect to prescreen before interviewing on college campuses, and 150 organizations (30.7%) do not expect to prescreen. Last year, 65.2% of the respondents prescreened on college campuses and 34.8% did not. (Page 30)

Now that more organizations are prescreening before conducting initial interviews on colleges campuses, it becomes necessary to know what factors are considered most important during this process. According to the surveyed employers, "extremely high" on their list of factors was the identification of academic majors. Those factors receiving ratings of "high" importance when prescreening were the following: degree levels of the graduates, stated career goals, overall grade point averages, major grade point averages, previous work experiences and locational preferences.

Ratings of "medium" were given to college organizations and activities and expected dates of graduation. Prior military experiences received "low" consideration when prescreening according to employers answering this question. (Page 33)

With a greater emphasis on prescreening, more employers are requesting closed schedules when interviewing on college campuses. Of those employers responding to the survey, 36.9% requested closed schedules last year, while 63.1% did not

request closed schedules. During 1984-85, an increase of 4.7% is expected in numbers of closed schedules arranged by organizations on college campuses. (Pages 9 and 31)

Work Environment Trends

It was expected that trends in the work environment might provide insight into skills needed by new college hires during the next few years. According to employers surveyed, the greatest changes in the work environment can be expected from computer applications, an expected increase of 29.8% during the next five years. Moderate increases can be expected for training required to become productive on the job (+17.2%); technical training required to perform assigned tasks (+16.1%); and complexity of job assignments (+13.3%). Only a slight increase in automated work stations and robotics (+8.0%) is expected during the next five years. (Page 40)

Making Liberal Arts Graduates More Employable

Placing liberal arts graduates is usually a major concern of most placement offices. This question was posed to help liberal arts graduates become more employable.

"Almost always" seen as helping liberal arts graduates become more employable were courses in accounting, finance, writing, and communications. Courses in business administration, management, data processing and public speaking were "sometimes" seen as increasing employability. (Page 39)

Hiring Handicappers

Employers reported that their organizations "almost always" hired handicapped people if they were the most qualified, and these individuals were "almost always" identified through regular interviewing and hiring procedures. Only "sometimes" were special efforts exerted to locate assignments for handicappers. (Page 47)

When handicapped persons apply to prospective employers, they need to know if their physical limitations should be listed on credentials and resumes. To learn about employers' opinions on this topic, this question was included. According to most employers responding to this question, handicappers should "sometimes" list their physical limitations. Of those responding, 28% recommended that physical limitations "always" or "almost always" be listed. On the other side, 34% said that "seldom" or "never" should physical limitations be listed. (Page 44)

Career Planning Needs

Career planning should "seldom" begin at the sixth grade or before, according to the employers surveyed. Starting in the seventh, eighth, and ninth grades, career planning should "sometimes" begin. From the tenth grade in high school through the sophomore year in college, career planning should "almost always" begin. For juniors and seniors in college, employers think that career planning should "always" be started and well on its way. (Page 48)

In any effective career planning operation, keeping college faculty, staff, and placement personnel aware of current career opportunities is a major task. With this goal in mind, this question was asked of employers to learn about their suggestions for effective programs.

In the opinions of employers responding to this questionnaire, the following programs will "almost always" be effective: work during summers outside college; consulting with business, industry, and government employers; inviting employer representatives to classes; studying employer literature; attending career fairs; researching career opportunities; and reading follow-up reports on graduates.

A program that is "sometimes" effective, in the view of employer representatives, is taking career tests in placement offices. (Page 46)

Remedies For Too Many Seeking Interviews

According to employers answering this question, 20 minute interview appointments (rather than the usual 30 minute interviews) and telephone interviews with candidates on overflow lists are strong possibilities. Viewing video tapes of candidates on overflow lists also received some consideration.

Other options that were recommended by employers were prescreening and preselection, shorter first interviews with longer second interviews held in placement offices, sending additional recruiters, and better descriptions for interview schedules to encourage only the most qualified to apply. As other ways to get their qualifications before employers, write-ins, walk-ins, placement office referrals, career fairs, cooperative education programs, internships, and summer employment experiences were suggested. (Page 51)

Tests and Other Documents Required of Job Applicants

Before new college graduates can go to work for employers, what tests or other documents are required? Employers most often require copies of transcripts (306), or official transcripts (255), physical examinations (243), and aptitude or mental ability tests (94). Sometimes requested are reference checks (31), security checks (11), polygraph tests (5), TB tests (2), or other similar documents. (Page 54)

Recruiting Problems Experienced Last Year

Employers listed several areas that concerned them regarding last year's recruiting experiences. Highest on their list was a lack of sufficient engineers and other technical graduates. Employers also mentioned the scarce supply of minority applicants and female graduates in these fields.

Education employers cited the limited availability of teachers in mathematics, the sciences, English, special education, speech correction, school psychologists, and bilingual education. Employer competition was quite heavy for candidates in these categories last year, and even more demand is expected this year.

There was another major issue that concerned employers. Too often, more applicants were requesting interviews and evaluations than time permitted.

According to employers, many unprepared candidates were applying for jobs with organizations, and recruiters were spending too much time with these individuals when they could have been interviewing more qualified candidates for their available positions.

Improvement of the organization's image was another major emphasis of employers last year. In particular, attracting minority and women applicants for available positions was a challenge. Lay-offs and plant closings in some organizations tended to damage these efforts. Also, some organizations were just starting up their recruiting again, so sign ups on their schedules were very limited. Generally, employers expressed a need for better contacts with college faculty, placement staff, and campus organizations.

Limited budgets and personnel to perform the recruiting function were two other concerns cited by several employers. In the opinions of employers, an overextension of their personnel staffs led to poor performance by recruiters, and the slow response time from their clerical staffs was caused by the backlog of work in personnel offices. Also, too many requests for appearances at career fairs were received, so all requests from student organizations could not be honored.

More career planning by students before interviewing was suggested because many graduates were interviewing without knowledge of the available positions, a waste of valuable time for recruiters. Making students aware of career opportunities available to them and directing the right individuals to the right careers would be a major improvement for placement offices. Also, more screening of applicants by placement offices before interview sign ups would help employers find individuals who could meet their required qualifications. In general, employers wanted more prescreened and preselected candidates on their interview schedules. (Pages 55 and 56)

New Recruitment Practices

This year (1984-85), employers are generally placing more emphasis on efficiency in the recruitment process and concentrating on a reduction in costs per hire for new college graduates.

Organizations' images will receive special attention this year. Videotapes, audiovisual presentations, and other VCR materials are being developed by employers to increase the visibility of their organizations on campuses. By sending more speakers to campuses, providing more promotional materials, and improving the quality of recruiting materials, employers expect to create a more professional image of their organizations on college campuses.

With the goal of better communication between employers and college students, more recruiters are being sent to campuses for interview schedules. Also, attendance at more recruiting fairs and posting more job openings with placement offices are expected to make graduating students more aware of job opportunities available with employers.

Recruitment of more minorities is another special interest of employers this year. Their concern is to obtain an adequate proportion of minority to non-minority candidates hired by their organizations. Recruiting at more minority colleges is expected, and a greater emphasis will be placed on the most talented minority graduates available on the job market.

Recruiting teams are another technique being used this year. It is expected that the hiring process can be shortened if individuals are interviewed, evaluated, and recommended for appointment within a very short span of time. Some employers are also conducting both first and second interviews on college campuses, hoping this will reduce the number and cost of plant visits. It is also expected that this will quicken the pace for hiring new college graduates.

Prescreening techniques are being mentioned as an emphasis this year. Soon, some employers will only recruit at colleges and universities where prescreening, preselection, and closed interview schedules are permitted. More telephone screening and interviewing will also be done by employers. In addition, more placement office recommendations, faculty identification of high potential students, and direct mail campaigns will be used to encourage the best graduates to sign up for interviews with employers. Along these same lines, employers will tighten their written specifications to encourage fewer, but better, applicants to request interviews when employers visit campuses. Better training of recruiters is planned, and employers expect to interview more walk-in candidates to determine if these individuals are the best ones for available job opportunities.

More advertising announcing campus visits is also expected. College newspapers with campus inserts, Placement Manual advertisements, donations to academic departments, scholarship programs, and billboards will be used to enhance the images of organizations. As another technique, additional promotional materials will be distributed at colleges and universities where organizations do not recruit.

More attention will be aimed at key colleges and universities where the major share of employers' new hires are being found. To assist with this task, key managers will be assigned to individual schools, so organizations will become more familiar with programs and personnel at these colleges. Additional staff in college relations will be found to support additional programs at these key institutions.

Computerization of application materials will be designed to reduce response time and increase accuracy of organization records. This computerization of the personnel offices will include on-line resumes, automated word processing systems, and electronic resume referrals. Many more on-line data systems will be developed to help employers search for matches between applicants and job openings.

More research will be completed by employers to determine reasons for applicants accepting or rejecting offers of employment. This research will include longitudinal studies of recent college hires and their career progress to identify patterns (via computer) which might call for redirection of campus recruiting efforts. (Pages 57 and 59)

Which category best describes your organization, and how many SALARIED employees (excluding clerical staff) are on the payroll of your organization? Absolute frequencies are listed for each answer on the first line, percentages of total on the second line, row percentages on the third line, and column percentages on the fourth line of each block.

Employer Categories

FREQUENCY PERCENT ROW PCT COL PCT	Number of Salaried Employees						
	1-99	100-499	500-999	1000-4999	5000-9999	10,000+	TOTAL
ACCOUNTING	9 1.37 37.50 12.86	9 1.37 37.50 5.96	0 0.00 0.00 0.00	2 0.30 8.33 1.03	3 0.46 12.50 6.25	1 0.15 4.17 1.28	24 3.65
AEROSPACE	0 0.00 0.00 0.00	1 0.15 5.88 0.66	3 0.46 17.65 2.56	6 0.91 35.29 3.09	4 0.61 23.53 8.33	3 0.46 17.65 3.85	17 2.58
AGRIBUSINESS	2 0.30 15.38 2.86	3 0.46 23.08 1.99	2 0.30 15.38 1.71	5 0.76 38.46 2.58	1 0.15 7.69 2.08	0 0.00 0.00 0.00	13 1.98
AUTOMOTIVE	3 0.46 13.04 4.29	7 1.06 30.43 4.64	2 0.30 8.70 1.71	7 1.06 30.43 3.61	0 0.00 0.00 0.00	4 0.61 17.39 5.13	23 3.50
BANKING FIN	9 1.37 17.31 12.86	7 1.06 13.46 4.64	9 1.37 17.31 7.69	23 3.50 44.23 11.96	2 0.30 3.85 4.17	2 0.30 3.85 2.56	52 7.90
CHEMICALS	3 0.46 10.00 4.29	4 0.61 13.33 2.65	3 0.46 10.00 2.56	7 1.06 23.33 3.61	3 0.46 10.00 6.25	10 1.52 33.33 12.82	30 4.56
COMMUNICATION	0 0.00 0.00 0.00	2 0.30 50.00 1.32	1 0.15 25.00 0.85	1 0.15 25.00 0.52	0 0.00 0.00 0.00	0 0.00 0.00 0.00	4 0.61
CONSTRUCTION	4 0.61 21.05 5.71	4 0.61 21.05 2.65	3 0.46 15.79 2.56	5 0.76 26.32 2.58	1 0.15 5.26 2.08	2 0.30 10.53 2.56	19 2.89
EDUCATION	8 1.22 7.77 11.43	30 4.56 29.13 19.87	28 4.26 27.18 23.93	30 4.56 29.13 15.46	4 0.61 3.88 8.33	3 0.46 2.91 3.85	103 15.65
TOTAL	70 10.64	151 22.95	117 17.78	194 29.48	48 7.29	78 11.85	658 100.00

(Continued)

Continued. . .

Employer Categories

FREQUENCY PERCENT ROW PCT CO. PCT	Number of Salaried Employees						
	1-99	100-499	500-999	1000-4999	5000-9999	10,000+	TOTAL
ELECTR MACH	2 0.30 8.33 2.86	4 0.61 16.67 2.65	6 0.91 25.00 5.13	5 0.76 20.83 2.58	4 0.61 16.67 8.33	3 0.46 12.50 3.85	24 3.65
ELECTRONICS	0 0.00 0.00 0.00	13 1.98 30.23 8.61	8 1.22 18.60 6.84	11 1.67 25.58 5.67	4 0.61 9.30 8.33	7 1.06 16.28 8.97	43 6.53
RESTAURANTS	3 0.46 10.71 4.29	11 1.67 39.29 7.28	3 0.46 10.71 2.56	6 0.91 21.43 3.09	1 0.15 3.57 2.08	4 0.61 14.29 5.13	28 4.26
PACKAGING	1 0.15 10.00 1.43	1 0.15 10.00 0.66	0 0.00 0.00 0.00	5 0.76 50.00 2.58	3 0.46 30.00 6.25	0 0.00 0.00 0.00	10 1.52
GOVERNMENT	2 0.30 7.41 2.86	2 0.30 7.41 1.32	4 0.61 14.81 3.42	10 1.52 37.04 5.15	5 0.76 18.52 10.42	4 0.61 14.81 5.13	27 4.10
HOSPITALS	1 0.15 7.14 1.43	8 1.22 57.14 5.30	1 0.15 7.14 0.85	3 0.46 21.43 1.55	0 0.00 0.00 0.00	1 0.15 7.14 1.28	14 2.13
HOTELS MOTELS	3 0.46 42.86 4.29	1 0.15 14.29 0.66	1 0.15 14.29 0.85	1 0.15 14.29 0.52	0 0.00 0.00 0.00	1 0.15 14.29 1.28	7 1.06
MERCHANDISING	2 0.30 5.13 2.86	8 1.22 20.51 5.30	11 1.67 28.21 9.40	12 1.82 30.77 6.19	4 0.61 10.26 8.33	2 0.30 5.13 2.56	39 5.93
METALS PRODS	5 0.76 20.83 7.14	4 0.61 16.67 2.65	4 0.61 16.67 3.42	8 1.22 33.33 4.12	2 0.30 8.33 4.17	1 0.15 4.17 1.28	24 3.65
TOTAL	70 10.64	151 22.95	117 17.78	194 29.48	48 7.29	78 11.85	658 100.00

(Continued)

Continued. . .

Employer Categories

FREQUENCY / PERCENT / ROW PCT / COL PCT	Number of Salaried Employees						
	1-99	100-499	500-999	1000-4999	5000-9999	10,000+	TOTAL
MILITARY	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.30 28.57 1.03	0 0.00 0.00 0.00	5 0.76 71.43 6.41	7 1.06
PETROLEUM	0 0.00 0.00 0.00	3 0.46 13.64 1.99	3 0.46 13.64 2.56	6 0.91 27.27 3.09	1 0.15 4.55 2.08	9 1.37 40.91 11.54	22 3.34
PRINTING PUBL	1 0.15 14.29 1.43	2 0.30 28.57 1.32	1 0.15 14.29 0.85	3 0.46 42.86 1.55	0 0.00 0.00 0.00	0 0.00 0.00 0.00	7 1.06
UTILITIES	2 0.30 3.85 2.86	8 1.22 15.38 5.30	10 1.52 19.23 8.55	22 3.34 42.31 11.34	5 0.76 9.62 10.42	5 0.76 9.62 6.41	52 7.90
RESEARCH	6 0.91 15.00 8.57	16 2.43 40.00 10.60	8 1.22 20.00 6.84	8 1.22 20.00 4.12	1 0.15 2.50 2.08	1 0.15 2.50 1.28	40 6.08
SERV VOL ORGS	4 0.61 50.00 5.71	1 0.15 12.50 0.66	2 0.30 25.00 1.71	1 0.15 12.50 0.52	0 0.00 0.00 0.00	0 0.00 0.00 0.00	8 1.22
TIRE RUBBER	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.15 33.33 0.85	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.30 66.67 2.56	3 0.46
CONGLOMERATES	0 0.00 0.00 0.00	2 0.30 11.11 1.32	3 0.46 16.67 2.56	5 0.76 27.78 2.58	0 0.00 0.00 0.00	8 1.22 44.44 10.26	18 2.74
TOTAL	70 10.64	151 22.95	117 17.78	194 29.48	48 7.29	78 11.85	658 100.00

Observations: Responses to this year's Recruiting Trends survey were received from 658 employers representing business, industry, governmental agencies, and educational institutions. Of the respondents, 79.9% were businesses and industries, 15.7% educational institutions, and 5.2% governmental agencies and military services. Organizations with 10,000 or more employees were represented by 11.9% of the respondents, those with five to ten thousand employees were 7.3% of the respondents, and organizations with a thousand to five thousand employees represented 29.5% of the respondents.

Representing organizations with five hundred to a thousand employees were 117 respondents (17.8%), those with 100 to 499 employees were 151 respondents (23.0%), and those with one to ninety-nine employees were represented by 70 employers (10.6%).

These numbers reflect the fact that employers of all sizes and all types are included in this survey.

In the LAST YEAR (1983-84), what change, if any, has occurred in the number of SALARIED employees working for your organization?

	CHANGE IN SALARIED EMPLOYEES LAST YEAR																		
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 3-4	DEC. 5-6	DEC. 7-8	DEC. 9-10	DEC. 11-24	DEC. 25-49	DEC. 50-100	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
CHANGE IN NUMBER OF SALARIED EMPLOYEES	2	4	30	30	20	56	45	81	172	66	29	21	4	23	18	4	1	606	1.5

Observations: To learn about the trend in size of organizations represented by this sample, responding employers were surveyed regarding the change in numbers of salaried employees working for their organizations during last year. According to these employers, approximately 1.5% more salaried employees were added to their organization during 1983-84. This compares with a decrease of 1.4% during 1982-83. From these figures, it seems that organizations, on the average, were growing slightly (1.5%) during last year.

In the LAST YEAR (1983-84), what change, if any, has occurred in the number of SALARIED employees working for your organization?

	CHANGE IN SALARIED EMPLOYEES LAST YEAR																		
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 3-4	DEC. 5-6	DEC. 7-8	DEC. 9-10	DEC. 11-24	DEC. 25-49	DEC. 50-100	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
EMPLOYER CATEGORIES																			
ACCOUNTING	1	1	.	2	2	3	3	3	7	.	.	.	.	1	.	.	.	23	9.2
AEROSPACE	.	.	1	1	1	3	1	2	7	.	.	.	.	1	.	.	.	17	3.5
AGRIBUSINESS	.	.	.	.	.	3	.	.	3	2	.	3	.	1	.	.	.	12	-1.2
AUTOMOTIVE	.	.	1	2	1	2	3	2	4	5	.	.	.	3	.	.	.	23	1.8
BANKING FIN	.	.	2	1	2	2	3	7	17	3	5	4	.	2	.	1	.	49	-0.1
CHEMICALS	.	.	2	.	.	1	2	5	10	3	3	1	.	.	1	.	.	28	0.9
COMMUNICATION	.	.	.	2	.	.	.	.	.	.	.	.	.	1	1	.	.	4	-3.8
CONSTRUCTION	1	.	.	1	.	3	.	.	7	4	1	.	.	2	.	.	.	19	5.0
EDUCATION	.	.	2	3	3	4	6	17	30	21	4	.	1	2	.	.	.	93	1.1
ELECTR MACH	.	1	3	1	1	3	5	1	4	.	.	.	1	1	1	.	1	23	1.8
ELECTRONICS	.	2	4	5	1	7	5	2	9	.	1	.	.	.	3	.	.	39	6.3
RESTAURANTS	.	.	2	2	3	3	2	2	8	1	.	1	.	.	1	1	.	26	1.6
PACKAGING	.	.	.	.	1	.	.	1	4	1	.	1	.	.	1	.	.	9	-2.6
GOVERNMENT	.	.	1	.	.	2	1	4	6	5	3	1	.	.	.	.	.	23	0.9
HOSPITALS	.	.	.	1	.	1	.	2	7	2	.	.	.	1	.	.	.	14	0.4
HOTELS MOTELS	.	.	1	.	.	1	1	1	3	.	.	.	.	.	.	.	.	7	5.3
MERCHANDISING	.	.	.	2	.	3	3	6	11	4	3	.	.	.	1	.	.	33	0.5
METALS PRODS	.	.	.	2	2	3	1	3	4	5	1	1	.	.	.	1	.	23	-0.3
MILITARY	.	.	1	.	.	.	.	.	2	.	.	.	.	.	.	.	.	3	8.3
PETROLEUM	.	.	1	1	.	.	1	4	3	1	1	4	.	1	2	.	.	19	-2.3
PRINTING PUBL	.	.	.	1	.	.	1	1	1	1	1	.	.	1	.	.	.	7	0.0
UTILITIES	.	.	.	2	1	4	3	9	15	5	3	1	1	2	4	.	.	50	-1.5
RESEARCH	.	.	5	1	2	7	4	5	3	1	.	2	.	2	2	1	.	35	2.4
SERV VOL ORGS	.	.	1	.	.	.	.	2	2	.	1	.	.	2	.	.	.	8	0.6
TIRE RUBBER	.	.	1	.	.	.	.	1	.	.	.	.	1	.	.	.	.	3	6.3
CONGLOMERATES	.	.	2	.	.	1	.	1	4	2	2	2	.	.	1	.	.	15	0.6

Continued. . .

Observations: Although numbers of salaried employees working for surveyed organizations increased by an average of 1.5% last year, responses varied greatly among organizations. For instance, decreases in number of salaried employees occurred in communication (-3.8%); glass, paper, packaging and allied products (-2.6%); petroleum and allied products (-2.3%); public utilities including transportation (-1.5%); agribusiness industries (-1.2%); metals and metal products (-0.3%); and banking and finance (-0.1%)

Those organizations with significant increases in salaried employees were led by accounting firms (9.2%); tire and rubber products (6.3%); electronic and instruments (6.3%); hotels, motels, and recreational facilities (5.3%); construction and building materials manufacturers (5.0%); aerospace and component parts organizations (3.5%); automotive and mechanical equipment companies (2.7%) and research consultant services (2.4%).

Those organizations with moderate increases in new employees included electrical machinery and equipment companies (1.8%); food, beverage processing and restaurants (1.6%); educational institutions (1.1%); chemicals, drugs and allied products (0.9%); government administration (0.9%); volunteer and service organizations (0.6%); diversified conglomerates (0.6%); merchandising and related retail services (0.5%); and hospitals and health services (0.4%). Experiencing no change in numbers of salaried employees were printing publishing, and information services (0.0%) and military services (0.0%).

This year (1984-85), what change, if any, do you anticipate in the number of SALARIED employees working for your organization?

	CHANGE IN SALARIED EMPLOYEES FOR 1984-85																	
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 3-4	DEC. 5-6	DEC. 7-8	DEC. 9-10	DEC. 11-24	DEC. 25-49	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
ANTICIPATED CHANGE IN SALARIED EMPLOYEES	5	6	24	30	12	65	62	107	203	47	16	15	6	8	1	2	609	3.5

Observations: This year, employers expect to increase the numbers of salaried employees working for their organizations by approximately 3.5%. This compares with an actual increase of 1.5% reported by employers for last year. From these data a healthy, but moderate, increase in numbers of salaried employees can be expected.

This year (1984-85), what change, if any, do you anticipate in the number of SALARIED employees working for your organization?

	CHANGE IN SALARIED EMPLOYEES FOR 1984-85																		
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 3-4	DEC. 5-6	DEC. 7-8	DEC. 9-10	DEC. 11-24	DEC. 25-49	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
EMPLOYER CATEGORIES																		
ACCOUNTING	.	.	2	3	3	3	3	3	5	.	.	.	.	.	.	1	23	3.9
AEROSPACE	.	.	.	1	1	4	4	3	1	.	1	1	.	1	.	.	17	2.6
AGRIBUSINESS	.	.	.	.	.	2	.	2	4	3	1	.	.	.	.	.	12	0.5
AUTOMOTIVE	.	.	.	.	1	1	5	3	8	3	1	.	.	1	.	.	23	0.9
BANKING FIN	2	2	.	2	.	2	7	7	21	3	.	3	.	1	.	.	50	6.8
CHEMICALS	.	.	1	1	1	.	2	8	13	3	.	.	.	.	.	.	29	2.1
COMMUNICATION	.	.	.	.	.	1	.	2	.	1	.	.	.	.	.	.	4	2.0
CONSTRUCTION	.	.	1	2	.	2	2	1	5	4	.	1	.	1	.	.	19	2.3
EDUCATION	.	.	2	3	.	7	12	21	33	8	3	3	1	1	.	.	94	1.6
ELECTR MACH	1	1	.	1	.	4	6	2	6	.	1	.	1	1	.	.	24	7.9
ELECTRONICS	1	1	9	5	2	8	3	2	4	2	1	.	.	.	1	.	39	12.1
RESTAURANTS	.	1	1	2	1	3	3	5	8	1	.	1	.	.	.	.	26	5.2
PACKAGING	.	.	.	.	.	1	.	1	5	2	.	.	.	.	.	.	9	0.4
GOVERNMENT	.	.	1	1	.	2	.	3	9	2	2	.	2	.	.	.	22	1.1
HOSPITALS	.	.	.	.	.	1	.	1	10	.	1	1	.	.	.	.	14	-0.1
HOTELS MOTELS	.	.	1	.	.	.	1	1	4	.	.	.	.	.	.	.	7	4.4
MERCHANDISING	.	.	1	2	1	3	.	8	16	3	.	.	.	.	.	.	34	2.4
METALS PRODS	.	1	.	.	1	3	5	4	6	3	.	.	.	.	.	.	23	4.3
MILITARY	1	.	.	.	.	.	.	1	2	.	.	.	.	.	.	.	4	25.3
PETROLEUM	.	.	1	2	.	1	3	4	5	1	.	.	.	1	.	.	18	3.3
PRINTING PUBL	.	.	.	1	.	.	.	3	2	.	1	.	.	.	.	.	7	1.7
UTILITIES	.	.	.	1	.	6	3	11	17	5	3	2	.	.	.	1	49	-0.1
RESEARCH	.	.	2	3	1	8	.	7	7	2	.	2	1	1	.	.	34	3.4
SERV VOL ORGS	.	.	1	.	.	.	1	1	3	.	1	1	.	.	.	.	8	2.6
TIRE RUBBER	.	.	.	.	.	1	.	1	.	.	.	.	1	.	.	.	3	0.0
CONGLOMERATES	.	.	1	.	.	2	1	2	8	1	.	.	.	.	.	.	15	2.9

Continued. . .

Observations: On the average, employers expect to increase their salaried payrolls by about 3.5% during 1984-85. This moderate increase in number of salaried employees will vary significantly from employer to employer.

Anticipating the greatest increases in salaried employees were organizations in the electrical machinery and equipment (17.9%); and electronics and industries (12.1%). These were followed closely by increased of 6.8% for banking, finance and insurance companies (6.8%); (5.2%) for food, beverage processing and restaurants; (5.1%) for metals and metal product firms, (4.4%) for hotels, motels, and recreational facilities; (4.3%) for metals and metal products; (3.9%) for accounting firms; (3.4%) for researching consulting organizations; (3.3%) for petroleum and allied products; and (2.6%) for aerospace and component organizations.

Moderate increases in salaried employees were anticipated in glass, paper, packaging and allied products (0.4%); agribusiness (0.5%); automotive and mechanical firms (0.9%);government administration (1.1%); hotels, motels and recreational facilities (1.2%); educational institutions (1.6%); printing, publishing, and information services (1.7%); communications, radio, TV and newspaper publishers (2.0%); chemicals drugs and allied products (2.1%); construction and building materials manufacturers (2.3%), aerospace and component organizations (2.6%), and diversified conglomerates (2.9%).

Those expecting no increases or even slight declines in salaried employees are tire and rubber products (0.0%); public utilities including transportation (-0.1%); and hospitals and health services (-0.1%).

How many new college graduates were hired by your organization last year (1983-84) for professional positions?

Number of New Hires

FREQUENCY ROW PCT	Number of Salaried Employees 1-99	100-499	500-999	1000-4999	5000-9999	10,000+	TOTAL
NO RESPONSE	9	16	3	12	3	4	
NONE HIRED	30 37.50	20 25.00	12 15.00	15 18.75	2 2.50	1 1.25	80
1-19	28 13.59	80 38.83	51 24.76	40 19.42	2 0.97	5 2.43	206
20-49	1 0.83	24 19.83	31 25.62	51 42.15	7 5.79	7 5.79	121
50-99	0 0.00	3 5.08	15 25.42	28 47.46	4 6.78	9 15.25	59
100-149	0 0.00	1 2.56	1 2.56	21 53.85	9 23.08	7 17.95	39
150-199	0 0.00	1 4.35	0 0.00	11 47.83	6 26.09	5 21.74	23
200-299	0 0.00	0 0.00	0 0.00	4 28.57	3 21.43	7 50.00	14
300-499	0 0.00	0 0.00	0 0.00	0 0.00	3 21.43	11 78.57	14
500-999	0 0.00	0 0.00	0 0.00	0 0.00	3 27.27	8 72.73	11
1000 OR MORE	0 0.00	0 0.00	0 0.00	1 8.33	2 16.67	9 75.00	12
TOTAL	59	129	110	171	41	69	579

Sum of Hires = 60,076 Mean = 120

Observations: According to employers responding to this survey, a total of 60,076 new college graduates were hired by their organizations last year. On the average, approximately 120 new employees were hired by 499 employers who indicated that new college graduates were hired by their organizations.

Of the employers responding to this question, 80 indicated that their organizations hired no new college graduates last year. On the other hand, 499 other organizations hired anywhere from 1 to 5,500 new graduates last year.

How many new college graduates does your organization expect to hire this year (1984-85) for professional positions?

Number of New Hires

Number of Salaried Employees

FREQUENCY ROW PCT	1-99	100-499	500-999	1000-4999	5000-9999	10,000+	TOTAL
NO RESPONSE	7 .	7 ..	2 .	8 .	2 .	4 .	.
NONE HIRED	26 31.71	23 28.05	10 12.20	18 21.95	3 3.66	2 2.44	82
1-19	35 16.83	84 40.38	46 22.12	36 17.31	2 0.96	5 2.40	208
20-49	0 0.00	26 20.63	37 29.37	53 42.06	4 3.17	6 4.76	126
50-99	0 0.00	3 5.26	14 24.56	26 45.61	7 12.28	7 12.28	57
100-149	0 0.00	1 2.50	3 7.50	21 52.50	7 17.50	8 20.00	40
150-199	0 0.00	1 5.00	1 5.00	12 60.00	4 20.00	2 10.00	20
200-299	0 0.00	0 0.00	0 0.00	6 28.57	7 33.33	8 38.10	21
300-499	0 0.00	0 0.00	0 0.00	2 15.38	2 15.38	9 69.23	13
500-999	0 0.00	0 0.00	0 0.00	0 0.00	3 18.75	13 81.25	16
1000 OR MORE	0 0.00	0 0.00	0 0.00	1 7.69	3 23.08	9 69.23	13
TOTAL	61	138	111	175	42	69	596

Sum of Hires = 66,500 Mean = 133

Observations: When questioned about quotas for new graduates to be hired by their organizations during 1984-85, surveyed employers reported an anticipated goal of 66,500. Compared to last year's actual hires of 60,076, this is an increase of 10.7%. Of the employers responding to this question, 80 indicated that no new college graduates were hired last year, and 82 organizations expect to hire none this year.

For 1983-84, what percent of your offers of employment to new TECHNICAL college graduates were accepted?

Percent Accepted

Number of Salaried Employees

FREQUENCY ROW PCT	1-99	100-499	500-999	1000-4999	5000-9999	10,000+	TOTAL
NO RESPONSE	49 .	70 .	52 .	65 .	9 .	10 .	.
NONE HIRED	4 14.29	8 28.57	4 14.29	8 28.57	3 10.71	1 3.57	28
1-9%	0 0.00	3 37.50	2 25.00	3 37.50	0 0.00	0 0.00	8
10-19%	0 0.00	1 14.29	4 57.14	2 28.57	0 0.00	0 0.00	7
20-29%	2 15.38	1 7.69	2 15.38	4 30.77	1 7.69	3 23.08	13
30-39%	0 0.00	0 0.00	4 21.05	6 31.58	5 26.32	4 21.05	19
40-49%	0 0.00	5 15.15	5 15.15	10 30.30	2 6.06	11 33.33	33
50-59%	3 5.00	13 21.67	2 3.33	21 35.00	6 10.00	15 25.00	60
60-69%	0 0.00	5 10.20	7 14.29	18 36.73	9 18.37	10 20.41	49
70-79%	0 0.00	6 14.29	11 26.19	17 40.48	1 2.38	7 16.67	42
80-89%	2 5.88	8 23.53	8 23.53	10 29.41	1 2.94	5 14.71	34
90-99%	2 6.25	6 18.75	3 9.38	12 37.50	3 9.38	6 18.75	32
100%	6 13.04	19 41.30	9 19.57	7 15.22	4 8.70	1 2.17	46
TOTAL	19	75	61	118	35	63	

Mean = 59.0%

Observations: One measure of an organization's effectiveness during recruitment is the percent of job offers accepted by new college graduates. For new technical college graduates recruited last year (1983-84), surveyed employers reported that 59.0% of their offers of employment were accepted. This compares to last year's rate of 60.1%, a slight decrease in acceptance rate. This change in rate, if significant at all, may be another indicator that the job market for technical college graduates is improving slightly.

For 1983-84, what percent of your offers of employment to NON-TECHNICAL college graduates were accepted?

Percent Accepted

FREQUENCY ROW PCT	Number of Salaried Employees 1-99	100-499	500-999	1000-4999	5000-9999	10.000+	TOTAL
NO RESPONSE	48	65	37	60	11	16	.
NONE HIRED	2 8.00	10 40.00	5 20.00	6 24.00	2 8.00	0 0.00	25
10-19%	0 0.00	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1
20-29%	0 0.00	3 37.50	2 25.00	2 25.00	0 0.00	1 12.50	8
30-39%	1 16.67	2 33.33	1 16.67	1 16.67	1 16.67	0 0.00	6
40-49%	1 5.26	2 10.53	3 15.79	4 21.05	4 21.05	5 26.32	19
50-59%	4 7.84	7 13.73	7 13.73	12 23.53	2 3.92	19 37.25	51
60-69%	0 0.00	5 14.71	4 11.76	15 44.12	5 14.71	5 14.71	34
70-79%	2 3.64	4 7.27	9 16.36	21 38.18	8 14.55	11 20.00	55
80-89%	1 1.85	8 14.81	11 20.37	23 42.59	5 9.26	6 11.11	54
90-99%	2 3.57	8 14.29	13 23.21	24 42.86	2 3.57	7 12.50	56
100%	7 8.75	31 38.75	20 25.00	15 18.75	4 5.00	3 3.75	80
TOTAL	20	80	76	123	33	57	389

Mean = 68.5%

Observations: Offers of employment to non-technical college graduates were accepted at the rate of 68.5% last year (1983-84). This compares to an acceptance rate of 65.3% in 1982-83. Acceptance rates for technical and non-technical graduates changes in acceptance rates from 1982-83 to 1983-84 may tend to indicate a slight improvement in the market for technical college graduates and a continued erosion of the job market for non-technical graduates.

This year (1984-85), what change, if any, does your organization anticipate in the hiring of new college graduates?

	PERCENTAGE CHANGE IN HIRING																	
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 3-4	DEC. 5-6	DEC. 9-10	DEC. 11-24	DEC. 25-49	DEC. 50-100	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
TYPES OF GRADUATES																		
BACHELORS GRADUATES	34	12	25	16	7	21	35	33	239	7	2	3	6	9	6	3	458	9.2
WOMEN GRADUATES	16	16	17	27	6	31	24	38	238	4	3	4	1	.	3	.	428	7.7
MINORITY GRADUATES	24	13	20	39	9	40	36	60	176	4	1	.	2	1	2	.	427	10.2
MBA/MS GRADUATES	8	9	8	13	6	11	9	31	259	5	4	1	1	3	3	5	376	2.7
DOCTORAL GRADUATES	5	3	5	2	1	6	10	21	249	3	1	.	.	.	.	7	313	0.7

Observations: To obtain a reading on the anticipated job market for new college graduates during 1984-85, employers were questioned about their expected hiring quotas. According to the employers surveyed, quotas for bachelor's degree graduates will increase by 9.2% this year. For women and minority graduates, quotas are expected to increase by 7.7% and 10.2%, respectively. MBA graduates and master's candidates can expect an increase in quotas of approximately 2.7%, and doctoral candidates can expect an increase of 0.7%.

This year (1984-85) what change, if any, does your organization anticipate in the hiring of new college graduates?

	ANTICIPATED CHANGE IN HIRING																			
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 3-4	DEC. 5-6	DEC. 7-8	DEC. 9-10	DEC. 11-24	DEC. 25-49	DEC. 50-100	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
ACADEMIC MAJORS																			
AGRICULTURE	1	.	1	3	2	.	.	8	192	2	.	.	.	.	.	.	4	213	-1.0
PACKAGING	4	.	.	.	.	2	.	5	188	.	1	.	.	.	.	.	1	201	1.6
ACCOUNTING	10	2	7	14	5	10	12	29	216	2	5	.	.	2	2	2	2	320	3.8
FINANCE	2	3	2	8	5	7	13	13	194	2	2	.	.	1	.	2	2	256	1.2
GEN BUS ADMIN	6	1	4	5	4	9	6	16	203	3	1	1	.	.	.	1	1	261	3.0
HRIM	4	1	1	1	1	3	1	2	181	1	.	.	.	.	.	.	3	199	1.1
MARKETING	4	2	5	13	4	12	12	16	177	6	3	1	.	1	1	2	2	261	2.2
PERSONNEL	5	1	1	3	3	2	6	15	195	3	2	1	.	.	1	.	2	240	1.9
COMMUNICATION	2	.	.	2	4	1	4	6	187	2	1	.	.	.	.	.	2	211	0.4
EDUCATION	2	.	.	3	2	5	11	19	197	3	2	.	.	.	.	.	2	246	0.6
CHEMICAL ENGR	6	2	5	6	2	9	5	10	185	3	1	1	1	.	1	1	3	241	2.5
CIVIL ENGR	6	4	2	3	2	1	3	10	192	4	1	3	1	2	1	1	4	240	1.7
COMPUTER SCIENCE	11	7	10	18	3	23	20	47	136	4	1	5	.	1	3	4	4	297	5.0
ELECTRICAL ENGR	17	11	16	19	8	18	25	23	148	3	.	2	1	.	3	6	3	303	8.1
MECHANICAL ENGR	15	7	2	12	7	17	16	27	176	3	3	3	1	2	.	4	5	300	5.1
METALLURGY MATERIALS SCIENCE	6	1	1	2	.	6	7	9	169	1	1	.	1	1	.	1	3	209	1.9
PETROLEUM ENGR	.	.	1	1	.	1	1	5	183	.	.	.	1	.	.	.	3	196	-1.3
HUMAN ECOLOGY	.	.	.	.	.	.	.	1	183	.	.	.	.	.	.	.	3	187	-1.6
RETAILING	2	.	2	1	1	.	2	3	178	1	.	.	.	1	.	.	4	195	-0.7
LIBERAL ARTS/ARTS/LETTERS	.	.	2	1	3	4	4	14	186	2	2	.	.	.	1	1	4	224	-1.5
CHEMISTRY	3	2	3	5	.	4	8	14	184	.	1	.	.	.	1	2	3	230	0.8
GEOLOGY	1	.	.	.	1	1	2	4	184	.	.	.	.	.	.	.	4	197	-1.4
MATHEMATICS	4	2	.	3	2	9	8	27	178	1	1	1	2	.	1	.	2	241	1.8
PHYSICS	2	.	1	4	2	8	10	19	176	.	1	.	1	.	1	1	5	231	-0.8
SOCIAL SCIENCES	.	.	1	1	.	3	2	11	192	2	2	.	.	1	.	.	2	217	-0.6

Continued. . .

Observations: Job market demand for new college graduates will vary greatly, depending on the academic majors of individuals. Although the overall market is expected to increase by approximately 9.5%, the greatest increase in demand will be experienced for electrical engineers (+8.1%), mechanical engineers (+5.1%), computer science majors (+5.0%), accountants (+3.8%) and general business administration majors (+3.0%). Other majors experiencing some increase in demand will be chemical engineers (+2.5%), marketing majors (+2.2%) metallurgy and material science majors (+1.9%), mathematics majors (+1.8%), civil engineers (1.7%), and packaging majors (+1.6%).

Slight increases in demand are expected for personnel administration majors (1.9%); finance majors (1.2%); hotel, restaurant and institutional management majors (1.1%); chemistry majors (0.8%); education majors (0.6%); and communication majors (0.4%).

Declines in the job market are expected for the following: retailing majors (-0.7%), physicist (-0.8%), agriculture (-1.0%), social science majors (-1.2%), petroleum engineers (-1.3%), human ecology majors (-1.4%), geologists (-1.4%), and liberal arts and arts & letters graduates (-1.5%).

Depending on the academic majors selected by graduating students, the job market for next year will vary significantly from very good to poor.

This year (1984-85), what change, if any, does your organization anticipate in the hiring of new college graduates?

	ANTICIPATED CHANGE IN HIRING																		
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 3-4	DEC. 5-6	DEC. 9-10	DEC. 11-24	DEC. 25-49	DEC. 50-100	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
EMPLOYER CATEGORIES																		
ACCOUNTING	1	1	2	2	2	1	2	2	9	.	.	.	.	.	.	.	22	11.5
AEROSPACE	1	1	.	.	.	.	1	1	9	.	.	.	1	1	.	.	15	8.0
AGRIBUSINESS	.	.	1	.	.	2	.	.	6	.	.	.	.	.	.	.	9	4.1
AUTOMOTIVE	3	.	.	.	.	2	3	.	4	.	.	.	.	1	1	.	14	17.6
BANKING FIN	2	1	2	5	1	.	1	1	21	1	.	1	.	.	.	.	36	9.8
CHEMICALS	3	.	2	1	.	1	2	1	10	.	.	.	.	1	1	.	22	13.5
COMMUNICATION	.	.	.	.	.	.	.	.	3	.	.	.	.	.	.	.	3	0.0
CONSTRUCTION	.	1	2	.	.	2	1	.	6	.	.	1	.	.	.	.	13	8.5
EDUCATION	4	.	1	.	1	3	7	10	35	1	.	.	.	.	1	.	63	7.0
ELECTR MACH	2	2	1	.	.	2	2	1	11	.	1	.	.	.	.	.	22	15.5
ELECTRONICS	5	1	2	1	.	1	.	.	20	.	.	.	.	1	1	2	34	9.9
RESTAURANTS	2	.	.	.	1	1	1	2	12	1	.	.	.	.	.	.	20	10.9
PACKAGING	1	.	.	.	.	.	.	1	2	.	.	.	1	1	.	.	6	11.0
GOVERNMENT	.	.	3	1	1	1	.	1	9	1	1	.	.	1	.	.	19	3.7
HOSPITALS	.	.	.	.	.	.	1	1	4	.	.	.	.	.	.	.	6	1.0
HOTELS MOTELS	1	.	.	1	.	.	.	.	3	.	.	.	.	.	.	.	5	21.8
MERCHANDISING	1	2	3	2	1	.	1	2	19	.	.	.	.	.	.	1	32	6.6
METALS PRODS	.	.	1	.	.	2	2	1	8	1	.	.	1	.	.	.	16	2.2
MILITARY	.	.	.	.	.	.	.	2	1	1	.	.	.	.	.	.	4	0.5
PETROLEUM	3	.	2	.	.	.	2	.	5	.	.	.	.	.	1	.	13	23.5
PRINTING PUBL	.	.	1	.	.	.	.	1	2	.	.	.	.	1	.	.	5	0.4
UTILITIES	4	3	1	1	.	2	2	1	21	1	.	.	2	1	1	.	40	12.6
RESEARCH	.	.	.	2	.	.	4	4	10	.	.	1	.	.	.	.	21	1.8
SERV VOL ORGS	.	.	.	.	.	.	1	.	2	.	.	.	.	.	.	.	3	1.3
TIRE RUBBER	.	.	.	.	.	.	.	.	2	.	.	.	1	.	.	.	3	-3.3
CONGLOMERATES	1	.	1	.	.	1	1	1	4	.	.	.	.	1	.	.	10	11.1

Continued. . .

Observations: Hiring trends for new college graduates will vary greatly among types of organizations. According to the employers responding to this survey, the greatest increases in hiring for bachelor's degree graduates will be in petroleum and allied products (+23.5%); hotels, motels and recreational facilities (+21.8%); automotive and mechanical equipment companies (+17.6%); electrical machinery and equipment companies (+15.5%); chemicals, drugs and allied products (+13.5%); public utilities including transportation (+12.6%); accounting firms (+11.5%); conglomerates (+11.1%) electronics and instruments (+9.9%); banking, finance and insurance (+9.8%); and restaurants, food and beverage processing (+6.6%).

Those organizations with moderate increases in the job market will include construction and building manufacturers (+8.5%); aerospace and component organizations (+8.0%); educational institutions (+7.0%); agribusiness (+4.1%); governmental agencies (+3.7%); metal and metal products (+2.2%); research and consulting firms (+1.4%); service and volunteer organizations (+1.3%). and hospitals and health services (+1.0%).

Expected to remain about the same will be communications, radio, tv and newspaper organizations (0.0%) and military organizations (0.0%).

Those organizations with declining job markets include glass, paper, packaging and allied products (-2.0%) and tire & rubber products companies (-3.3%).

What change, if any, do you anticipate in the number of INTERVIEW SCHEDULES arranged by your organization on college campuses this year (1984-85)?

	CHANGE IN NO. OF INTERVIEW SCHEDULES																		
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 3-4	DEC. 5-6	DEC. 7-8	DEC. 9-10	DEC. 11-24	DEC. 25-49	DEC. 50-100	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
ANTICIPATED NUMBER OF INTERVIEW SCHEDULES	29	22	17	36	10	28	23	32	205	8	6	12	2	14	7	13	6	470	7.4

Observations: According to employers responding to this survey, a moderate increase in numbers of interview schedules on college campuses is expected (+7.4%). Although employers expect to increase their quotas by 9.2%, they expect to secure more new hires from just a few more campus interviews.

What change, if any, do you anticipate in the number of INTERVIEW SCHEDULES arranged by your organization on college campuses this year (1984-85)?

	CHANGE IN NO. OF INTERVIEW SCHEDULES																	TOT-	WEI-
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 3-4	DEC. 5-6	DEC. 7-8	DEC. 9-10	DEC. 11-24	DEC. 25-49	DEC. 50-100	AL	GHT-ED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
EMPLOYER CATEGORIES																			
ACCOUNTING	1	1	.	2	1	.	2	.	10	.	.	2	.	.	.	1	.	20	6.1
AEROSPACE	.	.	1	1	.	1	1	1	10	.	1	.	.	.	.	.	1	17	-3.3
AGRIBUSINESS	.	.	1	.	.	1	.	.	7	.	.	.	.	.	.	.	.	9	3.4
AUTOMOTIVE	3	2	1	.	.	1	.	1	6	1	.	.	.	.	1	.	.	16	25.2
BANKING FIN	2	2	1	3	.	.	3	2	17	1	.	1	.	1	.	.	.	33	10.6
CHEMICALS	3	.	1	1	1	1	1	2	6	.	1	1	.	3	.	2	1	24	4.8
COMMUNICATION	.	.	.	.	.	.	.	.	2	.	.	.	.	.	1	.	1	4	-31
CONSTRUCTION	.	1	.	.	1	2	1	.	7	1	1	.	1	.	.	.	.	15	4.0
EDUCATION	2	1	1	6	1	7	4	2	35	2	1	.	.	1	.	.	.	64	5.6
ELECTR MACH	.	2	.	4	.	1	1	.	8	.	.	.	.	3	.	.	.	19	6.3
ELECTRONICS	3	2	3	5	2	3	3	2	11	.	.	3	.	1	.	1	.	39	12.7
RESTAURANTS	2	.	.	2	1	.	.	2	10	1	.	.	.	.	.	.	1	19	6.8
PACKAGING	.	.	.	.	.	.	.	1	4	.	.	.	.	1	.	1	.	7	-8.3
GOVERNMENT	1	1	1	.	.	.	.	.	10	.	.	1	.	1	.	.	.	15	10.5
HOSPITALS	.	.	.	1	.	.	.	1	5	.	.	.	.	.	.	.	.	7	1.7
HOTELS MOTELS	.	2	1	.	.	.	.	.	3	.	.	.	.	.	.	.	.	6	20.8
MERCHANDISING	5	2	1	4	.	3	2	4	5	.	2	.	1	.	.	1	.	30	20.9
METALS PRODS	1	1	.	1	.	1	.	3	10	.	.	.	.	1	.	1	.	19	5.8
MILITARY	.	.	.	.	.	.	.	.	5	.	.	.	.	.	.	.	.	5	0.0
PETROLEUM	1	3	2	1	.	1	.	1	3	.	.	1	.	1	.	1	.	15	16.7
PRINTING PUBL	1	.	1	1	.	1	.	1	.	.	.	1	.	.	.	.	.	6	22.7
UTILITIES	3	1	1	2	1	1	2	3	14	2	.	2	.	.	2	2	1	37	4.2
RESEARCH	1	1	.	2	.	2	2	5	11	.	.	.	.	.	.	2	.	26	3.8
SERV VOL ORGS	.	.	.	.	.	.	1	.	1	.	.	.	.	.	.	.	.	2	2.0
TIRE RUBBER	.	.	.	.	1	.	.	.	.	.	.	.	.	1	1	.	.	3	-9.0
CONGLOMERATES	.	.	1	.	1	2	.	1	5	.	.	.	.	.	1	1	.	12	-2.3

Continued. . .

Observations: Changes in numbers of interview schedules will vary according to type of organization. According to the surveyed employers, the greatest increases in interview schedules can be expected from the following organizations: automotive and component (+25.2%); printing, publishing and information services (+22.7%); merchandising and related services (+20.9); hotels, motels, and recreational facilities (+20.8%); petroleum and allied products (+16.7%); electronics and instruments (+12.7%); banking and finance (+10.6%); and government administration (+10.5%).

Very moderate increases can be expected from restaurants (+6.8%); electrical machinery and equipment (+6.3%); accounting (+6.1%); metals and metal products (+5.8%); educational institutions (+5.6%); chemicals, drugs and allied products (+4.8%); public utilities including transportation (+4.2%); research and consulting services (+3.8%); agribusiness (+3.4%); volunteer and service organizations (+2.0%); and hospital and health services (+1.7%).

Those organizations expecting declines in interview schedules will include the following: communication (-31.0%); tire and rubber products (-9.0%); glass, paper, paper, packaging and allied products (-8.3%); and aerospace and components (-3.3%).

What percentage change, if any, does your organization anticipate in salary offers to 1984-85 college graduates by degree level and type of graduate?

	ANTICIPATED CHANGES IN SALARY OFFERS													TOTAL	WEIGHTED
	INC. OVER 10%	INC. 9-10%	INC. 7-8%	INC. 5-6%	INC. 3-4%	INC. 1-2%	SAME	DEC. 1-2%	DEC. 3-4%	DEC. 5-6%	DEC. 7-8%	DEC. OVER 10%	14		
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
TYPES OF GRADUATES															
BACHELORS GRADUATES	14	15	23	118	126	39	108	6	7	3	1	1	4	465	3.7
WOMEN GRADUATES	10	12	17	91	102	36	112	5	6	2	1	1	3	398	3.4
MINORITY GRADUATES	13	12	17	91	107	38	103	4	6	1	1	1	4	398	3.6
MBA/MS GRADUATES	7	10	20	83	74	22	113	3	2	2	.	.	27	363	3.3
DOCTORAL GRADUATES	3	5	12	55	40	12	106	1	1	.	.	.	49	284	2.9

Observations: Starting salary offers for 1984-85 college graduates are expected to increase again this year, up 3.7% for bachelor's degree graduates. This compares with an increase last year of 2.8%. For women graduates, an increase of 3.4% is expected. For minorities, an increase of 3.6% can be anticipated. MBA graduates and those with master's degrees can expect salary increases of 3.3%, while those graduates with doctoral degrees can expect an approximate starting salary increase of 2.9%. These figures compare to last year's increases of 2.5% for MBA and master's degree graduates and 1.8% for doctoral degree graduates.

What percentage change, if any, does your organization anticipate in salary offers to 1984-85 college graduates by academic major?

	ANTICIPATED CHANGES IN SALARY OFFERS															
	INC. OVER 10%	INC. 9-10%	INC. 7-8%	INC. 5-6%	INC. 3-4%	INC. 1-2%	SAME	DEC. 1-2%	DEC. 3-4%	DEC. 5-6%	DEC. 7-8%	DEC. 9-10%	DEC. OVER 10%	14	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
ACADEMIC MAJORS																
AGRICULTURE	1	1	3	20	20	8	94	.	2	.	.	.	.	79	228	1.7
PACKAGING	2	1	1	18	17	4	93	1	.	.	.	.	.	76	213	1.7
ACCOUNTING	3	6	5	60	62	27	109	3	5	1	1	.	.	34	316	2.7
FINANCE	3	4	5	36	40	22	109	2	3	.	.	.	.	45	269	2.3
GEN BUS ADMIN	4	6	5	36	38	20	116	1	4	1	.	1	.	36	268	2.2
HRIM	3	2	2	20	18	5	96	.	.	.	.	.	.	75	221	2.1
MARKETING	4	5	8	43	40	15	102	2	2	1	.	1	.	49	272	2.6
PERSONNEL	1	5	2	29	29	18	104	3	2	.	.	.	.	53	246	2.2
COMMUNICATION	1	3	3	19	18	10	106	1	.	.	.	.	.	62	223	1.9
EDUCATION	2	6	9	35	30	12	91	2	.	1	.	.	.	60	248	2.6
CHEMICAL ENGR	2	2	9	34	39	8	90	2	.	.	1	.	.	59	246	2.7
CIVIL ENGR	2	5	4	29	35	13	96	1	.	1	.	.	.	66	252	2.6
COMPUTER SCIENCE	7	6	20	68	56	23	78	2	5	.	.	.	1	40	306	3.5
ELECTRICAL ENGR	10	5	19	69	62	20	75	1	4	.	.	1	.	48	314	3.7
MECHANICAL ENGR	4	4	13	71	65	17	84	5	1	.	.	.	.	45	309	3.4
METALLURGY MATERIALS SCIENCE	2	2	9	28	27	9	90	3	1	.	.	.	.	68	239	2.7
PETROLEUM ENGR	2	1	1	22	18	3	92	1	.	.	.	.	1	79	220	2.4
HUMAN ECOLOGY	1	2	1	14	15	3	93	1	.	.	.	.	.	81	211	2.2
RETAILING	1	5	1	15	21	4	94	1	.	.	.	.	1	74	217	2.3
LIBERAL ARTS/ARTS/LETTERS	1	4	3	22	33	14	100	2	1	.	.	.	.	64	244	2.3
CHEMISTRY	1	2	8	31	37	13	99	.	.	.	.	.	.	64	255	2.5
GEOLOGY	2	1	4	19	20	5	90	2	1	.	.	.	.	77	221	2.2
MATHEMATICS	3	3	9	40	38	12	91	2	1	.	.	.	.	58	257	2.7
PHYSICS	2	2	9	30	36	16	86	.	.	.	.	.	.	61	242	2.6
SOCIAL SCIENCES	1	4	6	21	24	11	98	2	1	.	.	.	.	63	231	2.3

Continued. . .

Observations: Changes in starting salary offers will vary according to the academic majors of graduates. Employers responding to this year's survey indicate that starting salary increases in the 3% range can be expected for graduates with the following majors: electrical engineers (3.7%), computer science (3.5%), and mechanical engineers (3.4%).

Starting salary increases of 2.0% to 2.9% will include the following: accounting (2.7%), chemical engineers (2.7%), metallurgy materials science (2.7%), mathematics (2.7%), marketing (2.6%), education (2.6%), civil engineering (2.6%), physics (2.6%), chemistry (2.5%), petroleum engineers (2.4%), finance (2.3%), retailing (2.3%), liberal arts/arts & letters (2.3%), social science (2.3%), general business administration (2.2%), geology (2.2%), human ecology (2.2%), and personnel administration (2.2%).

Academic majors receiving starting salary increases of less than 2% include the following: communications (1.9%), agriculture (1.7%), and packaging (1.7%).

What percentage change, if any, do you anticipate in salary offers to 1984-85 graduates with bachelor's degrees in your organization?

	ANTICIPATED CHANGES IN SALARY OFFERS													TOT-AL	WEI-GHT-ED
	INC. OVER 10%	INC. 9-10%	INC. 7-8%	INC. 5-6%	INC. 3-4%	INC. 1-2%	SAME	DEC. 1-2%	DEC. 3-4%	DEC. 5-6%	DEC. 7-8%	DEC. OVER 10%	14		
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
EMPLOYER CATEGORIES															
ACCOUNTING	.	1	.	8	5	2	5	.	.	.	1	.	.	22	3.4
AEROSPACE	.	1	.	4	4	.	3	1	.	.	.	.	.	13	3.7
AGRIBUSINESS	.	.	1	2	2	.	1	.	1	.	.	.	.	7	3.4
AUTOMOTIVE	.	.	.	4	3	1	5	1	.	.	.	.	.	14	2.6
BANKING FIN	1	1	3	7	6	4	11	1	2	.	.	.	.	36	3.1
CHEMICALS	1	.	1	8	8	3	1	.	.	.	.	.	.	22	4.8
COMMUNICATION	.	.	.	1	.	.	1	.	.	.	.	.	1	3	3.0
CONSTRUCTION	1	.	1	2	3	1	4	.	2	.	.	.	1	15	2.7
EDUCATION	2	5	9	24	14	3	7	1	.	2	.	.	.	67	5.0
ELECTR MACH	.	.	2	6	5	.	5	1	.	.	.	.	1	20	3.7
ELECTRONICS	3	.	2	6	14	2	5	.	1	.	.	.	1	34	4.4
RESTAURANTS	.	.	.	7	7	2	5	.	.	.	.	.	.	21	3.5
PACKAGING	.	.	.	2	3	2	.	.	.	.	.	.	.	7	4.0
GOVERNMENT	.	1	.	1	6	2	9	.	.	.	.	.	.	19	2.3
HOSPITALS	.	.	.	1	3	.	3	.	.	.	.	.	.	7	2.6
HOTELS MOTELS	1	1	1	1	.	.	1	.	.	.	.	.	.	5	7.2
MERCHANDISING	2	4	2	5	7	1	10	.	.	.	.	1	.	32	4.0
METALS PRODS	.	.	.	4	6	1	4	.	1	.	.	.	.	16	2.9
MILITARY	.	.	.	.	2	.	2	.	.	.	.	.	.	4	2.0
PETROLEUM	.	.	.	2	7	2	4	.	.	.	.	.	.	15	2.9
PRINTING PUBL	.	.	1	1	2	.	1	.	.	.	.	.	.	5	4.4
UTILITIES	3	.	.	11	8	5	11	1	.	1	.	.	.	40	3.4
RESEARCH	.	.	.	7	5	5	8	.	.	.	.	.	.	25	2.9
SERV VOL ORGS	.	.	.	1	.	.	.	.	.	.	.	.	.	1	6.0
TIRE RUBBER	.	.	.	.	1	.	1	.	.	.	.	.	.	2	2.0
CONGLOMERATES	.	1	.	3	4	2	1	.	.	.	.	.	.	11	4.4

Continued. . .

Observations: Starting salary increases will vary greatly between types of organizations. Those organizations with starting salary increases of 5% or more for bachelor's graduates will include the following: hotels, motels, and recreational facilities (7.2%); volunteer and service organizations (6.0%); and educational institutions (5.0%);

In the range of 3 to 4% are accounting (3.4%); electrical machinery and equipment (3.7%); food, beverage processing, and restaurants (3.5%); accounting (3.4%); public utilities including transportation (3.4%); agribusiness (3.4%); banking and finance (3.1%); and communications (3.0%).

Those types of organizations expecting to increase their starting salaries by 2% include the following: petroleum and allied products (2.9%), research consulting services (2.9%), metals and metal products (2.9%), construction and building materials manufacturers (2.7%), automotive and mechanical equipment (2.6%), hospitals and health services (2.6%), governmental administration (2.3%), and military (2.0%).

ACADEMIC MAJORS, ESTIMATED PERCENT CHANGE
AND ESTIMATED STARTING SALARIES 1984-85

Academic Majors Bachelor's Degrees	Estimated % Change	Estimated Starting Salary 1984-85
Electrical Engineering	3.7%	$ 28,086
Metallurgy/Material Science	2.7%	28,012
Mechanical Engineering	3.4%	28,004
Chemical Engineering	2.7%	27,827
Computer Science	3.5%	26,690
Physics	2.6%	25,411
Packaging	1.7%	23,358
Civil Engineering	2.6%	22,789
Mathematics	2.7%	20,630
Financial Administration	2.3%	19,506
Accounting	2.7%	19,262
Marketing/Sales	2.6%	19,157
General Business Administration	2.2%	17,782
Social Science	2.3%	17,640
Personnel Administration	2.2%	17,181
Education	2.6%	17,082
Hotel, Rest, Inst. Mgmt	2.1%	16,871
Agriculture & Natural Resources	1.7%	16,658
Communications	1.9%	16,299
Arts and Letters	2.3%	15,124
Human Ecology	2.2%	14,827
Average for Different Degree Levels		
Bachelor's	3.7%	20,470
Master's	3.3%	23,868
PhD	2.9%	26,808

*Source for base starting salaries when preparing this chart: John D. Shingleton and Edwin B. Fitzpatrick, ANNUAL SALARY REPORT---1983-84. East Lansing, Michigan: Placement Services, Michigan State University, 1984.

Observations: Again this year, the highest starting salaries are expected for electrical engineers, ($28,086), metallurgy and material science majors ($28,012), mechanical engineers ($28,004), chemical engineers ($27,827), and computer science majors ($26,690). Estimated starting salaries for other academic majors are listed above.

What percentage of new college graduates interviewed by your organization on campuses last year (1983-84) were hired?

Percent Hired	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	147	.	.	.
0	62	62	12.944	12.944
1	12	74	2.505	15.449
2	22	96	4.593	20.042
3	18	114	3.758	23.800
4	15	129	3.132	26.931
5	57	186	11.900	38.831
6	14	200	2.923	41.754
7	18	218	3.758	45.511
8	21	239	4.384	49.896
9	12	251	2.505	52.401
10	89	340	18.580	70.981
11	6	346	1.253	72.234
12	7	353	1.461	73.695
13	3	356	0.626	74.322
14	4	360	0.835	75.157
15	14	374	2.923	78.079
17	1	375	0.209	78.288
18	2	377	0.418	78.706
20	33	410	6.889	85.595
21	3	413	0.626	86.221
22	2	415	0.418	86.639
23	1	416	0.209	86.848
25	8	424	1.670	88.518
26	1	425	0.209	88.727
30	9	434	1.879	90.605
33	1	435	0.209	90.814
37	1	436	0.209	91.023
40	3	439	0.626	91.649
45	1	440	0.209	91.858
48	1	441	0.209	92.067
49	1	442	0.209	92.276
50	9	451	1.879	94.154
51	1	452	0.209	94.363
55	3	455	0.626	94.990
58	1	456	0.209	95.198
59	4	460	0.835	96.033
60	4	464	0.835	96.868
65	3	467	0.626	97.495
73	1	468	0.209	97.704
75	2	470	0.418	98.121
80	3	473	0.626	98.747
83	1	474	0.209	98.956
85	1	475	0.209	99.165
93	1	476	0.209	99.374
99	3	479	0.626	100.000

Observations: One measure of recruiting effectiveness in organizations is the percentage of new college graduates interviewed on campuses and hired by that organization. According to surveyed employers, 13.3% of those interviewed on campuses were hired. The most prevalent answers were 10% (89 organizations), 5% (57 organizations), and 20% (33 organizations).

What percentage of your organization's campus interview SCHEDULES were cancelled last year by you because of declining needs for new personnel in your organization?

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
.	147	.	.	.
0	375	375	78.288	78.288
1	9	384	1.879	80.167
2	5	389	1.044	81.211
3	2	391	0.418	81.628
4	2	393	0.418	82.046
5	10	403	2.088	84.134
7	2	405	0.418	84.551
8	1	406	0.209	84.760
10	16	422	3.340	88.100
12	1	423	0.209	88.309
13	1	424	0.209	88.518
15	3	427	0.626	89.144
16	1	428	0.209	89.353
19	1	429	0.209	89.562
20	3	432	0.626	90.188
21	1	433	0.209	90.397
23	1	434	0.209	90.605
25	1	435	0.209	90.814
26	1	436	0.209	91.023
30	3	439	0.626	91.649
33	1	440	0.209	91.858
35	1	441	0.209	92.067
39	1	442	0.209	92.276
40	2	444	0.418	92.693
50	13	457	2.714	95.407
55	4	461	0.835	96.242
60	1	462	0.209	96.451
67	1	463	0.209	96.660
70	1	464	0.209	96.868
75	1	465	0.209	97.077
88	1	466	0.209	97.286
90	1	467	0.209	97.495
95	2	469	0.418	97.912
99	10	479	2.088	100.000

Observations: When estimating job market trends for new college graduates, numbers of campus interview schedules cancelled because of declining needs are a fairly accurate measure. According to this survey of employers, 94 organizations cancelled interview schedules because of declining needs for new employees last year (1983-84). This was a cancellation rate of 6.9%. This compares with 160 employers who cancelled schedules during 1982-83 and responded to the Recruiting Trends questionnaire last year.

Does your organization pre-screen at colleges and universities where pre-screening is permitted?

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	138	.	.	.
YES	338	338	69.262	69.262
NO	150	488	30.738	100.000

Observations: A shift noted in this year's Recruiting Trends survey was the identification of new recruitment techniques. In recent years prescreening on college campuses has become a more prevalent recruitment technique. According to employers responding to this year's survey, 338 organizations (69.2%) expect to prescreen on college campuses, and 150 organizations (30.7%) do not expect to prescreen on college campuses.

Last year, 65.2% of the respondents prescreened on college campuses and 34.8% did not. In other words, prescreening is being used more often by employers.

Did your organization request any closed schedules when interviewing on college campuses last year?

	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
NO RESPONSE	136	.	.	.
YES	181	181	36.939	36.939
NO	309	490	63.061	100.000

Observations: With a greater emphasis on prescreening, more employers are requesting closed schedules when interviewing on college campuses. Of those employers responding to this year's survey, 36.9% requested closed schedules last year, while 63.1% did not request closed schedules. Further increases in closed schedules can be expected as more organizations emphasize prescreening in their recruiting activities.

What change, if any, do you foresee in the number of closed schedules arranged by your organization on college campuses this year (1984-85)?

	CHANGE IN NO. OF CLOSED SCHEDULES															
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 5-6	DEC. 11-24	DEC. 25-49	DEC. 50-100	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
ANTICIPATED NUMBER OF CLOSED SCHEDULES	15	10	13	23	3	10	10	15	359	2	2	2	1	4	469	4.7

Observations: The trend toward more closed schedules is supported by employer responses to this question. An increase of 4.7% is expected in numbers of closed schedules arranged by organizations on college campuses during 1984-85.

When prescreening candidates for initial campus interviews, how important are each of the following?

	LEVELS OF IMPORTANCE												
	EXTREMELY HIGH		HIGH		MEDIUM		LOW		NO		TOTAL RESPONSE		TOTAL
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
FACTORS CONSIDERED WHEN PRESCREENING													
ACADEMIC MAJOR	330	67	127	26	33	7	2	0	2	0	494	100	1.4
DEGREE LEVELS	101	21	196	40	139	29	37	8	13	3	486	100	2.3
STATED CAREER GOALS	60	12	208	43	180	37	31	6	6	1	485	100	2.4
OVERALL GRADE POINT AVERAGE	57	12	248	50	172	35	11	2	4	1	492	100	2.3
MAJOR GRADE POINT AVERAGE	80	16	272	56	117	24	12	2	4	1	485	100	2.2
COLLEGE ORGANIZATIONS & ACTIVITIES	28	6	160	33	228	47	64	13	8	2	488	100	2.7
PREVIOUS WORK EXPERIENCES	77	16	233	47	155	32	22	4	5	1	492	100	2.3
LOCATIONAL PREFERENCES	80	16	183	38	172	35	38	8	13	3	486	100	2.4
EXPECTED DATE OF GRADUATION	67	14	183	38	159	33	58	12	16	3	483	100	2.5
MILITARY EXPERIENCES	2	0	23	5	104	22	174	36	180	37	483	100	4.0

Observations: Now that more organizations are prescreening before conducting initial interviews on college campuses, it is important to know what factors are considered during this process. According to the surveyed employers, extremely high on their list of factors are academic majors. Those factors receiving ratings of "high" importance when prescreening were the following: degree levels of the graduate, stated career goals, overall grade point averages, major grade point averages, previous work experiences and locational preferences.

Ratings of "medium" were given to college organizations and activities and expected dates of graduation. Prior military experiences received "low" consideration when prescreening according to employers answering this question.

After initial interviews, when considering individuals for plant visits, how important are each of the following?

	LEVELS OF IMPORTANCE												
	EXTREMELY HIGH		HIGH		MEDIUM		LOW		NO		TOTAL RESPONSE		TOT-AL
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
FACTORS CONSIDERED FOR PLANT VISITS													
ATTITUDE TOWARD WORK ETHIC	222	44	235	47	32	6	5	1	7	1	501	100	1.7
STATED CAREER GOALS & CAREER OPTIONS	112	23	264	53	103	21	11	2	4	1	494	100	2.1
ACADEMIC MAJOR	228	45	200	40	57	11	12	2	5	1	502	100	1.7
DEGREE LEVEL	76	15	192	38	176	35	44	9	12	2	500	100	2.4
OVERALL GRADE POINT AVERAGE	56	11	242	48	182	36	16	3	5	1	501	100	2.3
ORAL COMMUNICATION SKILLS	216	43	255	51	28	6	1	0	4	1	504	100	1.7
WRITTEN COMMUNICATION SKILLS	112	22	237	47	125	25	25	5	7	1	506	100	2.2
PREVIOUS WORK EXPERIENCES	70	14	226	45	167	33	36	7	4	1	503	100	2.4
AGGRESSIVENESS & ASSERTIVENESS	78	16	247	49	167	33	6	1	5	1	503	100	2.2
ENTHUSIASM & CONFIDENCE	172	34	274	55	52	10	1	0	3	1	502	100	1.8
TECHNICAL KNOWLEDGE	107	21	232	46	124	25	26	5	12	2	501	100	2.2
MOTIVATION TO ACHIEVE	168	34	271	54	53	11	3	1	4	1	499	100	1.8
INITIATIVE	164	33	279	56	50	10	1	0	5	1	499	100	1.8
SOCIABILITY & FRIENDLINESS	72	15	246	50	158	32	15	3	4	1	495	100	2.3
COMMON SENSE	150	30	259	53	70	14	8	2	6	1	493	100	1.9
LEADERSHIP	95	20	232	48	142	29	11	2	4	1	484	100	2.2
MANAGEMENT SKILLS	46	9	164	34	210	43	54	11	15	3	489	100	2.6

Observations: Many graduating students inquire about factors considered by prospective employers when choosing individuals for plant visits after campus interviews. According to employers responding to this survey, the most important factors are attitude toward the work ethic, stated career goals and career options, academic major, oral communications skills, written communications skills, previous work experiences, aggressiveness and forgiveness enthusiasm and confidence, technical knowledge, motivation to achieve and initiative. Also on the list and receiving high ratings, common sense and leadership abilities.

The only factor receiving a rating of medium importance was management skills.

Based upon your experiences, what will be the availability of employment opportunities during 1984-85 for new college graduates in each geographical region of the United States?

	LEVELS OF JOB AVAILABILITY												
	EXTREMELY HIGH		HIGH		MEDIUM		LOW		NO		TOTAL RESPONSE		TOTAL
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
GEOGRAPHICAL REGIONS													
NORTHEAST (ME,MA,CT,DE,RI,ETC)	12	3	76	18	179	43	99	24	49	12	415	100	3.2
SOUTHEAST (FL,GA,VI,NC,SC,ETC)	24	6	134	33	155	38	46	11	45	11	404	100	2.9
NORTHCENTRAL (MI,MN,ND,SD,ETC)	16	4	50	11	204	47	139	32	27	6	436	100	3.3
SOUTHCENTRAL (TX,OK,ID,KS,ETC)	22	6	137	34	142	36	51	13	46	12	398	100	2.9
NORTHWEST (AK,WA,OR,MT,UT,ETC)	3	1	36	9	148	38	125	32	80	20	392	100	3.6
SOUTHWEST (CA,NV,HI,NM,AZ,ETC)	44	11	152	38	124	31	39	10	45	11	404	100	2.7

Observations: According to employers responding to this survey, the greatest availability of jobs for any college graduates during 1984-85 will be in the southwest region. Next best on the list were the southcentral and southeast regions. These regions were rated last year near this same order.

It should be noted, however, that the job market in these regions has evidently improved slightly over last year since higher percentages of employers rated these regions with "high" or "extremely high" availability of jobs. The following ratings were received this year: southwest (48%), southcentral (40%), and southeast (39%). Last year, these regions received lower ratings: southwest (42%), southcentral (30%), and southeast (32%).

The next best geographical areas for jobs were the northeast, followed by the northcentral region, and finally the northwest region.

Approximately what percent of new professional hires in your organization last year (1983-84) were of the following types?

	PERCENTAGE OF NEW PROFESSIONAL HIRES															TOTAL	WEIGHTED
	0%	1-2%	3-4%	5-6%	7-8%	9-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%		
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
TYPES OF GRADUATES																	
NEW COLLEGE GRADUATES	15	45	16	15	9	43	53	51	34	52	30	37	39	34	32	505	41.7
EXPERIENCED COLLEGE GRADUATES	13	29	11	15	3	37	46	36	35	69	35	45	48	40	24	486	46.3

Observations: When advising new college graduates on trends in the job market, it is helpful to know the percent of new professional hires who are new college graduates, and those who are experienced individuals. According to the surveyed employers, 41.7% of last year's hires were new college graduates, while 46.3% were experienced college graduates.

What percent of new college graduates hired last year (1983-84) by your organization were from the following sources?

	PERCENTAGE OF NEW COLLEGE HIRES																
	0%	1-2%	3-4%	5-6%	7-8%	9-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
SOURCES OF NEW COLLEGE GRADUATES																	
ON-CAMPUS INTERVIEWING	70	33	13	14	5	32	22	23	27	34	32	39	52	53	36	485	44.6
JOB LISTINGS WITH PLACEMENT OFFICE	183	88	34	29	8	23	23	8	4	6	3	1	1	6	6	423	8.1
UNSOLICITED REFERRALS FROM PLACMNT	263	87	18	12	2	9	1	3	1	1	.	.	1	1	1	400	2.2
REFERRALS FROM CAMPUS ORGANIZATIONS	310	47	6	12	2	8	1	.	3	.	1	.	.	.	1	391	1.5
JOB LISTINGS WITH EMPLYMNT AGENCIES	306	43	16	13	3	13	5	6	2	1	1	1	1	.	2	413	2.9
COLLEGE FACULTY/STAFF REFERRALS	205	91	36	25	7	15	12	2	2	2	.	.	1	1	2	401	3.8
CURRENT EMPLOYEE REFERRALS	119	107	44	48	13	46	24	10	4	6	2	2	.	.	1	426	6.7
MINORITY CAREER PROGRAMS	263	81	19	20	5	8	4	1	2	.	1	.	.	.	.	404	1.8
WOMENS CAREER PROGRAMS	308	58	10	10	2	5	3	.	2	.	.	.	.	.	.	398	1.1
HIGH DEMAND MAJOR PROGRAMS	303	18	11	9	4	9	3	2	2	3	1	3	4	2	3	377	4.4
COOPERATIVE EDUCATION PROGRAMS	255	63	33	23	7	13	10	2	3	1	2	.	.	3	2	417	3.8
SUMMER EMPLOYMENT	238	75	38	26	4	17	11	3	1	2	.	.	.	1	1	417	3.1
PART-TIME EMPLOYMENT	273	66	22	9	4	10	13	3	2	5	1	.	.	.	.	408	2.8
INTERNSHIP PROGRAMS	244	83	19	17	5	11	15	6	2	4	1	2	.	.	.	409	3.6
WALK-INS	178	88	33	21	8	35	24	10	6	9	3	.	1	.	3	419	6.9
WRITE-INS	102	99	33	35	10	52	46	28	15	10	2	2	6	2	2	444	11.5
RESPONSES FROM WANT ADS	203	61	24	18	11	30	22	16	8	13	2	2	5	.	5	420	9.0

Observations: When new college graduates are preparing their job campaigns, it is helpful to know sources that might help them find their new employment. For this reason, this question was posed to employers reporting sources of their new college hires. According to employers responding to the survey, 44.6% of their new hires were obtained from on-campus interviews, 11.5% from write-ins, 9.0% from want-ads, 8.1% from job listings with placement offices, 6.9% from walk-ins, and 6.7% from current employee referrals. Percentages from other sources are listed above.

What percent of your new hires last year (1983-84) were from the following percentiles of their graduating classes?

	PERCENTAGE OF NEW COLLEGE HIRES																	
	0%	1-2%	3-4%	5-6%	7-8%	9-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
PERCENTILES OF GRADUATING CLASS																	
0-9% TOP	55	53	18	22	6	51	32	11	11	15	3	3	11	8	8	307	19.0
10-19%	27	14	17	21	6	43	47	37	29	22	11	4	20	7	12	317	29.6
20-29%	43	11	13	12	6	33	51	33	29	22	9	9	15	5	11	302	28.9
30-39%	72	23	10	18	5	32	38	35	14	12	3	3	4	3	6	278	18.4
40-49%	103	17	14	15	11	25	33	11	7	7	2	4	3	.	1	253	11.4
50-59%	134	19	8	15	4	30	14	3	3	8	1	3	.	.	2	244	7.6
60-69%	161	16	6	13	7	11	4	1	1	1	.	.	.	.	2	223	3.1
70-79%	182	10	10	6	1	6	.	1	.	1	.	1	.	.	1	219	1.9
80-89%	194	10	2	3	.	.	1	.	.	2	.	.	.	1	1	214	1.7
90-99% BOTTOM	201	6	2	.	.	.	.	.	.	1	.	.	.	.	1	211	0.8

Observations: In recent years, grade point averages have been used more predominantly among employers as a measure of quality when hiring college graduates. For this reason, a question about class standing of new hires was quite relevant.

According to the surveyed employers, 48.6% of their college hires ranked in the top 20% of their graduating classes. Another 28.9% were ranked in the 20 to 29% range. The remainder of college hires were obtained from the 30th and below percentile of graduating classes. As reported in this research, only 26.5% of new hires come from the bottom half of graduating classes.

To make liberal arts graduates more employable in your organization, which of the following courses would help them?

	FREQUENCY OF RESPONSE												
	ALWAYS		ALMOST ALWAYS		SOMETIMES		SELDOM		NEVER		TOTAL RESPONSE		TOTAL
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
COURSES FOR MORE EMPLOYABILITY													
ACCOUNTING/FINANCE	146	32	104	23	117	26	54	12	31	7	452	100	2.4
BUSINESS ADMINISTRATION	114	25	135	30	111	24	61	13	35	8	456	100	2.5
MANAGEMENT	85	19	120	27	142	31	64	14	41	9	452	100	2.7
DATA PROCESSING	112	25	133	29	125	28	54	12	28	6	452	100	2.5
WRITING/COMMUNICATION	127	28	134	30	99	22	58	13	36	8	454	100	2.4
PUBLIC SPEAKING	57	13	102	22	141	31	95	21	59	13	454	100	3.0

Observations: Placing liberal arts graduates is usually a major concern of most placement offices. This question was posed to help liberal arts graduates become more employable.

"Almost always" helping liberal arts graduates become more employable were courses in accounting, finance, writing, and communications. Courses in business administration, management, data processing and public speaking were "sometimes" seen as increasing employability.

What changes, if any, do you foresee in the work environment of your organization during the next five (5) years that will influence the qualifications needed for new college graduates hired by your organization?

	PERCENTAGE CHANGE IN WORK ENVIRONMENT																
	INC. 50+	INC. 25-49	INC. 11-24	INC. 9-10	INC. 7-8	INC. 5-6	INC. 3-4	INC. 1-2	SAME	DEC. 1-2	DEC. 5-6	DEC. 9-10	DEC. 11-24	DEC. 25-49	DEC. 50-100	TOTAL	WEIGHTED
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	MEAN
AREAS OF CHANGE																	
TRAINING TO BECOME PRODUCTIVE	43	33	43	80	11	30	30	8	182	1	.	1	.	.	2	464	17.2
TECHNICAL TRAINING REQUIRED	31	45	41	94	19	35	31	21	145	1	.	.	.	.	3	466	16.1
COMPLEXITY OF JOB ASSIGNMENTS	20	31	56	87	20	54	26	27	139	1	.	1	1	.	2	465	13.3
ROBOTICS/AUTOMATED WORK STATIONS	15	12	34	50	5	38	14	21	239	5	.	1	.	.	3	437	8.0
COMPUTER APPLICATIONS	70	75	89	68	19	45	33	16	47	2	1	.	.	2	1	468	29.8

Observations: It was expected that trends in the work environment might provide insight into skills needed by new college hires during the next few years. According to employers surveyed for this research, the greatest changes in the work environment can be expected from computer applications, an expected increase of 29.8% during the next five years. Moderate increases can be expected for training required to become productive on the job (+17.2%), technical training required to perform assigned tasks (+16.1%), and complexity of job assignments (+13.3%). Only a slight increase in automated work stations and robotics (+8.0%) is expected during the next five year span of time.

When summarizing the outlook for new college graduates this year (1984-85), how would you describe it for each degree level and type of graduate?

	EXPECTED OUTLOOK FOR NEW GRADUATES										TOTAL RESPONSE		TOTAL
	EXCELLENT		VERY GOOD		GOOD		FAIR		POOR				
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
TYPES OF GRADUATES													
BACHELORS GRADUATES	64	13	137	29	185	39	79	17	12	3	477	100	2.7
WOMEN GRADUATES	96	21	180	39	146	31	40	9	5	1	467	100	2.3
MINORITY GRADUATES	132	28	172	37	121	26	32	7	9	2	466	100	2.2
MBA/MS GRADUATES	37	8	96	22	172	39	95	22	36	8	436	100	3.0
DOCTORAL GRADUATES	23	6	47	12	90	22	146	36	96	24	402	100	3.6

Observations: When summarizing the job outlook for new college graduates this year (1984-85), employers reported a "very good" job market for women and minorities. A "good" market is expected for bachelor's and master's degree candidates. Only a "fair" market is expected for doctoral degree graduates.

When summarizing the outlook for new college graduates this year (1984-85), how would you describe it for each of the following academic majors?

	EXPECTED OUTLOOK FOR NEW GRADUATES										TOTAL RESPONSE		TOTAL
	EXCELLENT		VERY GOOD		GOOD		FAIR		POOR				
ACADEMIC MAJORS	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
AGRICULTURE	6	2	11	4	59	19	91	30	139	45	306	100	4.1
PACKAGING	4	1	12	4	74	25	97	33	109	37	296	100	4.0
ACCOUNTING	28	7	113	29	139	36	76	19	35	9	391	100	2.9
FINANCE	11	3	86	24	130	37	86	24	42	12	355	100	3.2
GEN BUS ADMIN	9	3	60	17	138	39	92	26	59	16	358	100	3.4
HRIM	14	5	37	12	80	26	88	29	85	28	304	100	3.6
MARKETING	30	8	96	27	126	35	54	15	53	15	359	100	3.0
PERSONNEL	3	1	29	8	115	32	129	36	79	22	355	100	3.7
COMMUNICATION	7	2	38	11	99	29	116	34	79	23	339	100	3.7
EDUCATION	16	4	25	7	76	21	129	36	112	31	358	100	3.8
CHEMICAL ENGR	36	11	66	19	104	31	66	19	67	20	339	100	3.2
CIVIL ENGR	13	4	41	12	104	32	94	28	78	24	330	100	3.6
COMPUTER SCIENCE	135	37	115	32	65	18	23	6	25	7	363	100	2.1
ELECTRICAL ENGR	137	39	94	27	58	17	24	7	36	10	349	100	2.2
MECHANICAL ENGR	50	14	111	32	104	30	41	12	40	12	346	100	2.7
METALLURGY MATERIALS SCIENCE	22	7	62	20	104	33	68	22	58	18	314	100	3.2
PETROLEUM ENGR	20	6	40	13	78	25	75	24	97	31	310	100	3.6
HUMAN ECOLOGY	3	1	12	4	49	17	109	38	114	40	287	100	4.1
RETAILING	14	5	23	8	99	33	83	27	85	28	304	100	3.7
LIBERAL ARTS/ARTS/LETTERS	3	1	15	4	59	18	131	39	129	38	337	100	4.1
CHEMISTRY	15	5	45	14	110	33	96	29	63	19	329	100	3.4
GEOLOGY	3	1	23	7	80	26	95	31	106	35	307	100	3.9
MATHEMATICS	31	9	72	21	123	36	70	21	45	13	341	100	3.1
PHYSICS	28	9	53	16	112	34	79	24	57	17	329	100	3.3
SOCIAL SCIENCES	3	1	13	4	49	15	123	38	140	43	328	100	4.2

Observations: Academic majors with a "very good" job outlook this year include only computer sciences and electrical engineering.

A "good" job market outlook is expected for graduates in the following: accounting, finance, general business administration, marketing, chemical engineering, mechanical engineering, metallurgy and materials science, chemistry, mathematics, and physics.

Only a "fair" market is expected for graduates with other academic majors.

When summarizing the outlook for new college graduates this year (1984-85), how would you describe it for bachelor's degree graduates in your organization?

	EXPECTED OUTLOOK FOR NEW GRADUATES										TOTAL RESPONSE		TOTAL
	EXCELLENT		VERY GOOD		GOOD		FAIR		POOR				
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
EMPLOYER CATEGORIES													
ACCOUNTING	1	5	1	5	12	57	2	10	5	24	21	100	3.4
AEROSPACE	3	18	2	12	4	24	3	18	5	29	17	100	3.3
AGRIBUSINESS	.	.	1	11	4	44	2	22	2	22	9	100	3.6
AUTOMOTIVE	1	6	1	6	8	50	4	25	2	13	16	100	3.3
BANKING FIN	4	11	9	24	16	43	4	11	4	11	37	100	2.9
CHEMICALS	.	.	4	17	8	35	9	39	2	9	23	100	3.4
COMMUNICATION	.	.	1	33	1	33	.	.	1	33	3	100	3.3
CONSTRUCTION	.	.	2	13	6	40	5	33	2	13	15	100	3.5
EDUCATION	7	11	11	17	19	30	10	16	17	27	64	100	3.3
ELECTR MACH	2	10	6	30	6	30	5	25	1	5	20	100	2.8
ELECTRONICS	1	3	10	29	15	44	3	9	5	15	34	100	3.0
RESTAURANTS	1	5	5	24	10	48	4	19	1	5	21	100	3.0
PACKAGING	2	29	.	.	3	43	1	14	1	14	7	100	2.9
GOVERNMENT	1	6	2	12	7	41	2	12	5	29	17	100	3.5
HOSPITALS	.	.	2	33	4	67	.	.	.	.	6	100	2.7
HOTELS MOTELS	.	.	1	17	3	50	1	17	1	17	6	100	3.3
MERCHANDISING	2	7	6	20	13	43	6	20	3	10	30	100	3.1
METALS PRODS	3	19	4	25	4	25	2	13	3	19	16	100	2.9
MILITARY	.	.	.	.	1	20	.	.	4	80	5	100	4.6
PETROLEUM	1	7	4	29	4	29	3	21	2	14	14	100	3.1
PRINTING PUBL	1	17	1	17	3	50	.	.	1	17	6	100	2.8
UTILITIES	5	12	6	14	19	44	7	16	6	14	43	100	3.1
RESEARCH	3	12	8	31	8	31	5	19	2	8	26	100	2.8
SERV VOL ORGS	1	50	.	.	.	.	.	.	1	50	2	100	3.0
TIRE RUBBER	1	33	.	.	2	67	.	.	.	.	3	100	2.3
CONGLOMERATES	1	8	3	25	3	25	1	8	4	33	12	100	3.3

Observations: The job outlook for new college graduates will vary depending on the type of organization. Most organizations received a job outlook rating of "good." Those with a rating of only "fair" included agribusiness, building construction and manufacturing, and government agencies. The sole employer category receiving a job outlook rating of "poor" was the military services.

Some organizations for handicapped persons are recommending that physical limitations not be listed on credentials and resumes. Do you agree?

	FREQUENCY OF RESPONSE												
	ALWAYS		ALMOST ALWAYS		SOMETIMES		SELDOM		NEVER		TOTAL		WEIGHTED
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
EMPLOYER RECOMMENDATIONS FOR LISTING PHYSICAL LIMITATIONS	41	9	91	19	183	39	79	17	80	17	474	100	3.1

Observations: When handicapped persons apply to prospective employers, they need to know if their physical limitations should be listed on credentials and resumes. To learn about employers' opinions on this topic, this question was included. According to most employers responding to this question, handicappers should "sometimes" list their physical limitations. Of those responding, 28% recommended that physical limitations "always" or "almost always" be listed. On the other side, 34% said that "seldom" or "never" should physical limitations be listed.

When measuring the effectiveness of your campus recruiting programs on college campuses, how important are each of the following factors?

	FREQUENCY OF RESPONSE												
	ALWAYS		ALMOST ALWAYS		SOMETIMES		SELDOM		NEVER		TOTAL RESPONSE		TOTAL
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
MEASURES OF EFFECTIVENESS													
NO. OF GRADUATES INTERVIEWED	57	12	169	35	157	33	65	14	29	6	477	100	2.7
NO. OF REFERRALS FROM INTERVIEWS	63	13	174	37	127	27	70	15	36	8	470	100	2.7
NO. OF PREVIOUS HIRES FROM SCHOOL	165	34	218	45	65	14	22	5	10	2	480	100	1.9
PRESTIGE OF COLLEGE OR UNIVERSITY	54	12	184	40	161	35	48	10	17	4	464	100	2.5
ACADEMIC MAJORS OFFERED BY COLLEGE	178	38	195	41	72	15	17	4	12	3	474	100	1.9
TOTAL NO. OF STUDENTS ON CAMPUS	6	1	58	12	185	39	150	32	70	15	469	100	3.5
NUMBER OF GRADUATING STUDENTS	20	4	105	22	183	39	113	24	50	11	471	100	3.1
PROXIMITY OF COLLEGE TO ORGANIZATION	64	13	161	34	142	30	67	14	43	9	477	100	2.7
QUALITY OF GRADUATES PREPARED	272	56	169	35	38	8	4	1	1	0	484	100	1.5
TYPES OF GRADS (LIB ARTS, ED, OR TECH)	152	32	159	33	117	25	31	7	16	3	475	100	2.2
EFFICIENCY OF PLACEMENT OFFICE	57	12	200	42	166	35	41	9	12	3	476	100	2.5
AVAILABILITY OF MINORITY GRADUATES	79	17	157	33	168	36	46	10	20	4	470	100	2.5
AVAILABILITY OF FEMALE GRADUATES	40	9	137	29	197	42	69	15	26	6	469	100	2.8
SUCCESS OF PREVIOUS RECRUITING	201	42	208	44	43	9	15	3	6	1	473	100	1.8
FUNDS AVAILABLE FOR RECRUITING	83	18	144	31	147	32	55	12	37	8	466	100	2.6
AVAILABLE RECRUITING STAFF	60	13	144	31	170	36	63	13	30	6	467	100	2.7
NO. OF POSITIONS AVAILABLE	189	40	176	37	84	18	19	4	7	1	475	100	1.9
AVAILABLE TIME FOR RECRUITING	74	16	152	32	170	36	57	12	23	5	476	100	2.6

Observations: What factors are used by employers when measuring the effectiveness of their campus recruiting? Knowing this information might help college placement offices provide more effective services.

According to surveyed employers, their most important concerns are numbers of previous hires from a university, academic majors offered at the college or university, quality of graduates, types of graduates, success of previous recruiting, and numbers of positions available. These factors are "almost always" important measures.

"Sometimes" influencing employer decisions to recruit on college campuses are: numbers of graduates interviewed, numbers of referrals from interviews, prestige of the college or university, numbers of graduating students, proximity of college to organization, efficiency of the placement office, availability of minority graduates, availability of female graduates, funds available for recruiting, available recruiting staff, and available time for recruiting. "Seldom" included as a factor when considering effectiveness of a recruitment program is the total number of students on a college campus.

To make college faculty, staff, and placement personnel more familiar with career opportunities available to their graduating students, which of the following would be most effective?

	FREQUENCY OF RESPONSE												
	ALWAYS		ALMOST ALWAYS		SOMETIMES		SELDOM		NEVER		TOTAL RESPONSE		TOTAL
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
PROGRAM CHOICES													
WORK DURING SUMMERS OUTSIDE COLLEGE	98	20	150	30	189	38	42	9	15	3	494	100	2.4
CONSULT WITH BUS, IND & GOVN EMPLOYERS	133	27	235	48	98	20	16	3	8	2	490	100	2.0
INVITE EMPLOYER REPRS TO CLASSES	93	19	177	36	177	36	34	7	10	2	491	100	2.4
STUDY EMPLOYER LITERATURE	118	24	186	38	155	32	26	5	2	0	487	100	2.2
ATTEND CAREER FAIRS	83	17	166	35	178	37	46	10	8	2	481	100	2.4
VISIT CO. REPRS. ON CAMPUS	156	32	250	51	72	15	8	2	3	1	489	100	1.9
TAKE CAREER TESTS AT PLACEMENT	12	3	62	13	233	49	140	30	27	6	474	100	3.2
RESEARCH CAREER OPPORTUNITIES	136	28	201	42	122	25	21	4	4	1	484	100	2.1
READ FOLLOW-UP REPORTS ON GRADS	91	19	188	39	171	35	29	6	7	1	486	100	2.3
ACCEPT COMPANY VISITS WHEN OFFERED	173	35	232	47	74	15	7	1	5	1	491	100	1.9

Observations: In any effective career planning operation, keeping college faculty, staff and placement personnel aware of current career opportunities is a major task. With this goal in mind, this question was asked of employers to learn about their suggestions for effective programs.

In the opinions of employers responding to this questionnaire, the following programs will "almost always" be effective: work during summers outside college, consulting with business, industry, and government employers, inviting employer representatives to classes, studying employer literature, attending career fairs, researching career opportunities, and reading follow-up reports on graduates.

A program that is viewed as being "sometimes" be effective is taking career tests in placement offices.

What is the attitude in your organization toward hiring handicapped people?

	FREQUENCY OF RESPONSE												
	ALWAYS		ALMOST ALWAYS		SOMETIMES		SELDOM		NEVER		TOTAL RESPONSE		TOT-AL
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
ATTITUDE TOWARD HANDICAPPERS													
ARE HIRED IF MOST QUALIFIED APPLICANT	350	61	155	27	60	10	5	1	4	1	574	100	1.5
SPECIAL EFFORTS TO LOCATE ASSIGNMENTS	124	22	141	25	203	36	69	12	23	4	560	100	2.5
REGULAR INTERVIEWING & HIRING PROCEDURES	352	61	162	28	46	8	10	2	3	1	573	100	1.5

Observations: Employers report that their organizations "almost always" hire handicapped people if they are the most qualified, and these individuals are "almost always" identified through regular interviewing and hiring procedures. Only "sometimes" are special efforts exerted to locate assignments for handicappers.

In your opinion, how early in a student's education should career planning begin?

	FREQUENCY OF RESPONSE												
	ALWAYS		ALMOST ALWAYS		SOMETIMES		SELDOM		NEVER		TOTAL RESPONSE		TOTAL
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
WHEN TO BEGIN CAREER PLANNING													
KINDERGARTEN	7	1	9	2	31	6	87	16	405	75	539	100	4.6
1ST GRADE	10	2	10	2	37	7	94	18	382	72	533	100	4.6
2ND GRADE	9	2	8	2	46	9	97	19	364	69	524	100	4.5
3RD GRADE	12	2	14	3	60	11	107	20	334	63	527	100	4.4
4TH GRADE	16	3	15	3	82	16	116	22	296	56	525	100	4.3
5TH GRADE	21	4	25	5	105	20	120	23	258	49	529	100	4.1
6TH GRADE	29	5	40	7	146	27	118	22	206	38	539	100	3.8
7TH GRADE	46	9	68	13	172	32	124	23	129	24	539	100	3.4
8TH GRADE	62	11	107	20	190	35	90	16	99	18	548	100	3.1
9TH GRADE	119	21	160	29	168	30	55	10	54	10	556	100	2.6
10TH GRADE	185	33	176	31	138	25	33	6	28	5	560	100	2.2
11TH GRADE	255	46	172	31	103	18	12	2	16	3	558	100	1.9
12TH GRADE	317	56	152	27	80	14	6	1	11	2	566	100	1.7
COLLEGE FRESHMAN	318	57	137	25	89	16	6	1	8	1	558	100	1.7
COLLEGE SOPHOMORE	342	64	133	25	38	7	8	2	10	2	531	100	1.5
COLLEGE JUNIOR	427	81	48	9	18	3	14	3	20	4	527	100	1.4
COLLEGE SENIOR	460	85	24	4	8	1	16	3	34	6	542	100	1.4

Observations: Career planning should seldom begin at the sixth grade or before; according to the employers surveyed. Starting in the seventh, eighth and ninth grades, career planning should "sometimes" begin. From the tenth grade in high school through the sophomore year in college, career planning should "almost always" begin. For juniors and seniors in college, employers think that career planning should "always" be started and well on its way.

Are starting salary offers made by your organization negotiable?

	FREQUENCY OF RESPONSE												
	ALWAYS		ALMOST ALWAYS		SOMETIMES		SELDOM		NEVER		TOTAL RESPONSE		TOT-AL
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
ARE STARTING SALARIES NEGOTIABLE?	16	3	30	5	174	29	223	37	164	27	607	100	3.8

Observations: Although 64% of the employers reported that starting salary offers are "seldom" or "never" negotiable, another 37% of the employers reported that their starting salary offers were negotiable: 3% always, 5% almost always, and 29% sometimes.

When calculating starting salary offers for new college graduates in your organization, do you give additional amounts for the following?

	FREQUENCY OF RESPONSE										TOTAL RESPONSE		TOTAL
	ALWAYS		ALMOST ALWAYS		SOMETIMES		SELDOM		NEVER				
	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	N	PCTN	MEAN
FACTORS INFLUENCING DECISION													
CAMPUS LEADERSHIP ACTIVITIES	12	2	23	4	118	20	124	21	303	52	580	100	4.2
AGGRESSIVENESS	11	2	33	6	94	16	116	20	317	56	571	100	4.2
CANDIDATES OTHER OFFERS	6	1	22	4	170	30	136	24	241	42	575	100	4.0
ACADEMIC MAJOR	122	21	110	19	130	23	51	9	159	28	572	100	3.0
DEGREE LEVEL ACHIEVED	230	39	157	27	102	17	31	5	68	12	588	100	2.2
PAST WORK EXPERIENCES	151	26	193	33	155	26	27	5	62	11	588	100	2.4
OVERALL GRADE POINT AVERAGE	53	9	78	13	138	24	93	16	216	37	578	100	3.6
UNIVERSITY OF PREPARATION	29	5	53	9	143	25	101	18	246	43	572	100	3.8
SEX OF CANDIDATE	.	.	1	0	25	4	57	10	487	85	570	100	4.8
RACE OF CANDIDATE	.	.	3	1	32	6	55	10	473	84	563	100	4.8
CITIZENSHIP OF CANDIDATE	20	4	8	1	25	5	43	8	439	82	535	100	4.6
PRIOR MILITARY EXPERIENCE	24	5	27	5	120	23	92	18	251	49	514	100	4.0
STATISTICS FROM OTHER ORGANIZATIONS	43	8	100	18	158	29	69	12	183	33	553	100	3.5
ACCEPTANCE RATIO FOR OFFERS	9	2	33	6	137	25	91	16	286	51	556	100	4.1
PERSONALITY OF CANDIDATE	27	5	49	9	105	19	70	13	304	55	555	100	4.0

Observations: Only four factors influenced calculations of starting salary offers for new college graduates in organizations surveyed for this research. "Almost always" influencing starting salaries are degree levels achieved and past work experiences. "Sometimes" influencing starting salary offers are academic majors of graduates and starting salary statistics from other organizations. "Seldom" influencing starting offers are overall grade point averages achieved, university of preparation, prior military experiences, personality of the candidate, and acceptance ratio of offers. Also included in this group are other offers received by candidates, campus leadership activities, and candidates' aggressiveness. According to responses received, sex of the candidate, race of the candidate, and citizenship are never a factor.

Student demand has steadily exceeded available interview appointments with employers visiting campuses during the past few years. Employers miss good candidates because of this, and placement offices hear from concerned candidates who are not able to interview with all employers that interest them. Following are some possible methods to accommodate this demand. Please indicate which are acceptable to your organization:

Yes	48	No	486	Interview two candidates during same session
Yes	85	No	448	Have group interviews
Yes	526	No	50	Pre-select candidates
Yes	35	No	383	10 minute appointments
Yes	105	No	396	15 minute appointments
Yes	218	No	214	20 minute appointments
Yes	238	No	271	Review video tapes of candidates on overflow lists
Yes	273	No	232	Telephone interviews with candidates on overflow lists
Yes	144	No	373	Group interviews with candidates on overflow lists

Observations: According to employers responding to this survey, the alternative method receiving most consideration was pre-selection of candidates on interview schedules (526). Next on the list of options were 20 minute interview appointments and telephone interviews with candidates on overflow lists. These latter two methods received only a slight majority of response.

All other options were voted down, most in overwhelming numbers. Only video tapes of candidates on overflow lists even came close to receiving acceptance.

Employers were encouraged to recommend other methods to accommodate the demand for campus interviews. Their suggestions follow:

Prescreening was recommended as a major alternative. Employers wanted to review resumes or credentials of interested applicants and then select limited numbers of additional candidates for interviews. Resume books and prescreening credential services were listed as other options that would interest them. Most employers, however, were willing to provide more interviewers if they had some control over the quality of graduates being interviewed on these additional schedules.

One suggested technique was using the first campus interview as a screening device, and then candidates could be interviewed more extensively at second interviews in placement offices or at the employer's location. As still another effort at pre-screening candidates, written replies to employer questions were proposed.

Sending additional recruiters (26) was suggested as well as shorter interview times (5). Even expanding interview times into evening hours and Saturdays was proposed (10). Another idea was interviewing overflow candidates in the employers' offices (5). Group interviews (10) were advised only if the group setting resembled the candidate's future job setting (2), or for presentation of company information followed by individual, short, personal interviews. Some employers will interview all candidates who are interested in their organizations. On some campuses, expanded facilities for interviewing in other buildings or classrooms would be necessary to accomplish this.

Receiving resumes of overflow candidates (16) was viewed as a possible answer. If resumes or credentials of individuals who were unable to get interviews were forwarded to employers, then contact by telephone or mail could be initiated with those who interested the employer. Even a computer-based telephone system was cited by one employer.

Better descriptions of job openings were suggested as a way for graduating students to more closely match their career interests with available employment opportunities. Sometimes encouraging candidates to read company literature would save interviewing time and discourage those who did not fit. Employers say that closer attention should be given to stated job openings. Video tapes of employer information were posed as yet another way to get only interested students on employer schedules.

Improved interview signup systems were recommended to determine minimum criteria for interviews (degree levels, terms of graduation, academic majors, etc.). To assess the strength of a student's interest in an employer, bid systems were suggested. According to these employers, first-come, first-served signup systems should be avoided.

Career fairs, open houses, and campus visits arranged by colleges were encouraged, so candidates are allowed to seek out and impress recruiters. Also pre-recruiting sessions and information sessions were suggested for identifying outstanding candidates. Even area, regional, or metropolitan career fairs were advised.

Write-ins (13) and walk-ins (3) were cited as other alternatives available to candidates. Sometimes graduating students could show their flexibility and aggressiveness by using those methods. When making themselves known to employers, students were encouraged to be creative.

Placement office referrals were proposed as still other ways to get employers' attention. Employers say that recommendations from university faculty, staff, and placement personnel are usually considered very seriously.

Cooperative education experiences and summer employment were listed as still more ways to find employment with organizations that interest a student.

Observations: Employers recommended several alternative methods for gaining employment in their organizations. In the words of several employers, creative individuals will find their way through the maze. The less-capable ones will use the system as their excuse for failure.

Are the following required of job applicants in your organization?

	Pre-employment				After-employed			
Physical examinations	Yes	256	No	322	Yes	139	No	317
Drug tests	Yes	32	No	535	Yes	19	No	436
Attitude tests	Yes	38	No	524	Yes	16	No	436
Aptitude tests	Yes	98	No	456	Yes	26	No	423
Mental ability tests	Yes	67	No	489	Yes	20	No	419
Official transcripts	Yes	275	No	287	Yes	197	No	248
Copies of transcripts	Yes	327	No	204	Yes	111	No	291

Sometimes other items are required by some employers. They include the following: reference checks (31), security checks (11), proof of graduation and degree (13), application forms (5), resumes (5), citizenship papers (10) or permanent visa checks (3), or credit check (3). Still other employers require psychological tests (5), polygraph (2) or honesty tests (3), TB tests (7), veterans discharge papers (3), driving record checks (3), writing samples (1), written civil service exams (2), and professional tests (3).

Observations: The only item receiving an obvious majority of response from employers was the requirement for a copy of the graduate's transcripts (327 "yes to 204 "no" at the pre-employment level). The other requirements often needed by employers were physical examinations (256) and official transcripts (275).

What recruiting problems did your organization face last year (1983-84). With this question as a prompt, employers began to list several areas that concerned them regarding last year's recruiting experiences.

Not enough graduates were available in several academic areas (15), according to surveyed employers, and competition for engineers was especially keen last year (17). Also, there were too few female engineers (5), especially mechanical engineers (2), so all employer were not able to meet their quotas. A lack of technical graduates, in general, was bemoaned often (10) by the employers. Minority engineers (22) and accountants (3) were also scarce according to employers. Then, identifying minority candidates was cited as another issue. Other shortages included pharmacists and nurses in some geographical locations (2). Limited availability of teachers was also noted in mathematics (7), sciences (5) foreign languages (4), English (2), physics (1), business education (1), vocal and instrumental music (1), data processing/computer science (1), speech pathologists (1), physical therapists (1), school psychologists (1), special education teachers of all types (1), bilingual teachers (1), and graphic arts teachers (1). Competition for some graduates (3) seemed quite heavy, with minority applicants as examples of this situation (2). Competition for the strongest candidates was tremendous. Finding applicants for certain geographical locations (3) and types of industries (2) was time-consuming and sometimes very difficult.

Starting salary data were not readily available, according to employers (3), and salary competition among employers was sometimes a matter of concern (1). Often starting salary quotes were inflated, according to these employers.

Large numbers of applicants were seeking limited numbers of openings. Often more applicants were requesting interviews and evaluations than time permitted. Then too, there were many unprepared candidates available on the market (15). Employers were interviewing too many unqualified candidates while missing some good candidates, and this concerned employers (3). There were not enough days in the office to interview all good students. Some noted that too high an acceptance rate was experienced for hires. On this same theme, many unsolicited liberal arts graduates appeared on interview schedules when employer were not requesting them.

The organization's image was another major concern of many employers. It was particularly challenging to attracting minority and women applicants to certain companies. For some reason, a low student awareness existed for some companies (7), and remedying this situation was their major challenge. Layoffs and plant closing (3) were a nemesis for a few other organizations. For some companies that withdrew offers, their image was damaged for awhile. For others, startup of recruiting, especially the first year, was difficult. For most better contacts were needed on college campuses.

Timing of campus interviewing and plant visits was difficult. Positions were not open at the time of recruiting, but then became open when no candidates were available (21). Getting minorities and women on interview schedules was noted as a problem of concern to some employers. It was often cumbersome forecasting openings (8) before they occurred, because openings would occur after graduating students had left campuses and during summer months. On this same subject, internal planning was often lacking, so early scheduling of recruiting dates was not possible. Recruiting too late caused cancelled schedules and no shows. Scheduling campus visits to coincide with career days was a scheduling nightmare for other organizations. For some, finding enough time to visit all campuses the organization would like, was another difficulty. Plant visits were difficult to get scheduled, and getting student commitments for these was tough too. Bad weather caused its problems and not enough openings were available for candidates applying to a few organizations.

Limited budgets and personnel to perform a heavy workload was cited by several employers (5). Overextension of a short personnel staff lead to poor performance by recruiters when interviewing. Schedule conflicts for recruiters and their internal duties (3) was prevalent in some organizations. And too many follow-up calls from unqualified graduates (2) wasted the time and attention of personnel offices. A shortage of clerical staff sometimes created a backlog of work in personnel offices and more recruiters were needed for the load of interviewing schedules normally covered by organizations. Too many requests for appearances at career fairs were received, so all requests could not be honored. Too many students were getting two interviews with the same organization, and this was another waste of recruiters' time.

Career planning by students before interviews was suggested, because some more graduates were just "practicing interviews" during employer visits to campuses. Students sometimes interviewed without knowledge of the position which was a waste of valuable time for recruiters. Making students aware of career opportunities available to them and directing the right individuals to the right careers was a major improvement recommended for placement offices. More screening of interview signups by placement offices would help employers find individuals who could meet their required qualifications (9). Students reneging (6) on job acceptances was becoming an issue with some employers. On another issue, some colleges and universities were not cooperating on prescreening and preselection. As another bit of advice, more utilization of placement offices by minority students was encouraged by employers too.

Observations: Several areas of concern were listed by employers. Some problems could be solved by better management within organizations, while placement offices could help with other problems. Still others, such as the weather, were out of the hands of mere humans.

What new recruitment practices are being considered or used by your organization?

Throughout employer comments this year, an emphasis was seen on placing more efficiency in the recruitment process and reducing the cost of hiring new college graduates. Other comments included those listed below.

The organization's image was enhanced this year through several media. Video tapes (10), audio visual presentations, and other VCR materials were developed by employers. More visibility on campus was a major goal of several organizations, including sending more speakers to campuses (5). As one example, a speakers bureau was organized by company employees and available to make presentations to student groups. Communications with academic advisors (1) and minority organizations (2) were improved. Also more promotional activities were prepared to highlight employment opportunities in certain organizations. More professionally prepared recruiting materials were available, improving the impact of recruiting literature (4).

When no openings occurred, then organizations did not recruit on college campuses. Without job openings, employers believed they were doing a disservice to students when they interviewed on campuses.

More recruitment fairs were organized with various colleges attending; thus more graduates were interviewed with visits to fewer locations. Expanded on-campus recruiting was planned (21) at more colleges and universities, some not visited before, with twice-a-year visits to some campuses. Attendance at career fairs (17) was increased. Information/signup days (2) were initiated to increase recruitment productivity. Job vacancies were shared with more placement offices, and even nationwide bulletins were used more often. Newspapers were also used more often (3), especially out-of-state newspapers. Pre-recruitment sessions were being planned by many employers (24), and consolidated college recruiting was arranged where one division represented all divisions on one campus (2). More recruitment was planned at central locations to provide interviewing for all students, regardless of their schools. More centralized recruitment in regional areas was held, and some employers were entering recruitment consortiums to decrease their cost per hire.

Participation in cooperative education and internships programs (11) was listed as a new recruitment practice, as once again employers initiated more long-range recruitment practices. In shortage areas, these programs were promoted very well.

For recruitment of more minorities, special programs were planned to work closely with black engineering colleges. Obtaining an adequate proportion of minority and non-minority candidates was a major goal. More recruiting was provided at minority colleges, with the goal of more effective minority targeting. This year, a greater emphasis was placed on recruiting the most talented minority students (3).

For government employers, three-person teams were used to recruit throughout the country, thus enabling these recruiters to interview applicants, accept applications, evaluate applicants, conduct panel interviews, and recommend for appointment. This is expected to shorten the application process for government employers by at least 60 days.

For business and industry, team recruiting is becoming more prevalent. Still other organizations are reorganizing and consolidating recruitment efforts into modules that cut across traditional organizational lines. Still others are visiting fewer colleges with a greater emphasis at each college (8). Some employers are stopping the use of employment agencies.

Earlier recruiting was planned for December graduates so the best could be identified and pursued before other employers found them. For some employers, interviewing many to select the best was begun. For a couple of employers, more second interviews were held on campus to reduce the numbers and costs of plant visits (2). This year, a greater concentration of recruiting was aimed at colleges specializing in fields that met the needs of employers (4). Even the dropping of reference checks until later in the interviewing process was used as an efficiency measure (1).

Pre-screening techniques were mentioned more often. Eventually, some employers will recruit only at schools that have pre-screening and pre-selection (5) or closed interviews (3). This year, more telephone screening and interviewing was suggested before campus visits (3). To give applicants a better understanding of the organization's expectations, video tapes with samples of appropriate candidates were available from some companies. Having colleges recommend candidates to interview was stated as another technique (3), especially faculty identification of high-potential students. Direct mail campaigns were used to encourage the best to signup for interviews or agree to immediate plant visits. Greater reliance was placed on junior engineers, last year's hires, to assist with recruitment efforts. More closed schedules were requested, although some employers are now returning to all open schedules. Group interviews were also tried by employers with some success. When announcing interviews on campus, tighter specifications were written to encourage fewer, but better, applicants to request interviews. Training of recruiters was planned to improve the identification of most capable candidates. For walk-in applicants, personal interviews were encouraged to determine if good candidates might be available among these individuals. Even extra schedules were added to permit all interested students to interview.

More advertising (6), especially in college newspapers, with campus inserts, was one suggestion offered (3) by employers. Another was more advertising in Placement Manuals. Even donations to academic departments and scholarship programs (2) were resurrected this year by some companies. Advertising on billboards was prepared to enhance the organization's image. As another technique, distribution of additional promotional materials at colleges and universities where the organization does not recruit (2) was tried.

Using simulations was tried as a way of selecting candidates for one company. As another recruitment technique, semi-structured interviews and evaluations utilizing job families was tried. Teleconferencing interviews were receiving some experimental use. On some campuses, purchasing resume books was tested instead of conducting campus visits.

Reevaluation of current recruiting practices was planned by a few organizations. Often, increased hiring goals for technical graduates (5) and women (2) were mentioned. A serious analysis of productivity from recruiting efforts at specific schools was planned. Even revitalization and resumption of complete recruiting programs was begun.

Assignment of key managers to individual schools became a way to make an organization more familiar with colleges selected for recruiting. Some companies have open requisitions for pre-determined numbers of hires in certain academic areas. Additional staff in college relations was recommended.

Computerizing of applicant materials was designed in several companies to reduce response time and increase accuracy of organization records (4). Also, a computerized system for pre-screening was tried by one (1). The goal of all these systems was faster turnaround time, from identification of job openings to getting new college hires on the job. On-line resumes (2), electronic searches, and electronic resume referrals were used by several (4). For others, national job listing services were developed, and, for a few, more openings were listed in placement bulletins. On-line data bases were developed to search for matches between applicants and job openings.

Some employers reinstated management training programs after many such programs were discontinued during recent lean hiring years (5). Other employers were looking at the possibility of resurrecting their training programs (2).

More community and junior college recruiting was mentioned. For instance, initiation of campus recruiting was begun for two-year associate degree graduates in electro-mechanical technician programs. Also, hiring of more technologists was noted.

More research was completed to determine reasons for applicants accepting and rejecting offers of employment. Also, longitudinal studies were prepared for recent college hires and their career progress to identify patterns (via computer) which might call for re-direction of campus recruiting efforts (3).

Observations: Employers cited several new recruitment practices that might be worthy of further consideration.

EMPLOYERS RESPONDING TO SURVEY

-A-

A C Nielsen Co
Abbott Laboratories
Aberdeen Proving Ground
Abington School District
ADC-Magnet Controls
Aerojet Electrosystem
Aeronautical Systems Division
Aetna Casualty & Surety
Alabama Power Co
Albany Co S D #1
Alcan Aluminum Corp
Algonac Comm Schools
Allegan General Hospital
Allen & O'Hara Inc
Almont Comm Schools
Alpena Public Schools
Alpha Industries Inc
Altschuler Melvoin
Amer National Life Ins
Amer Natural Res Co
Amer Republic Realty
Amer Sterilizer Co
Amer Symphony Orchestra
American Appraisal
American Bank & Trust
American Hospital Supply
American Red Cross
American United Life
Amoco Production Co
Anchor Hocking
Ann Arbor Public Schools
Appleton Area School Dist
Aramco
Archway Cookies
Arco Petroleum Products
Arete Associates
Arinc Research Corp
Arkansas Power & Light
Armstrong World Ind
Arthur Anderson & Co
Arthur Young & Co
Ashland Chemical Co
Association Retarded Chldrn
Aurora East District 131

-B-

B F Goodrich Chemical Co
B F Goodrich Co
Babcock & Wilcox
Bangor Public Schools
Battle Creek Schools
Bay City Public Schools
BDM Corp
Berkley City SD
Belks Stores Service
Bell Laboratories
Beloit Public Schools
Bendix Autolite Corp
Beneficial Mgmt Corp
Benton Harbor Schools
Big Rapids Public Schools
Bill Knapps Michigan Inc
Birmingham School District
Bishop Buffets Inc
Black & Veatch
Bloom Engineering Co
Bloomfield Hills Schools
Blount International Ltd
Blue Cross of Florida
Blue Cross of Wisconsin
Blue Cross/Blue Shield
Boise Cascade Corp
Bonwit Teller
Booker Assoc Inc
Borg-Warner/Air Condition
Bottineau Public Schools #1
Brazos Electric Coop
Bridgeport-Spaulding
Bristol Leisenring
Brookline Public Schools
Brooklyn Union Gas
Brooks & Perkins
Brown & Root Inc
Brown & Sharpe Co
Bullitt County Sch District
Burlington Sch District #15

-C-

C Itoh & Co
CAI
CA Muer
Campbell Ewald Co
Career Research Systems Inc
Carolina Telephone
Carstab Corp
Caterpillar Tractor
CBS Technology Center
CECO Corporation
Celanese Corp
Cenex
Central Soya Company Inc
Cessna Aircraft
Champion International
Champlin Petroleum
Charleston County Schl District
Check/Simon/Rosner
Chemical Abstracts
Chemical Bank Cass City
Chemplex Co
Chemscape
Chicago Bridge & Iron
Chicago Milw Stpl Railroad
Chicago Tribune
Chrysler Corporation
Ciba-Geigy Corporation
Cigna Corporation
Cinci Milicron Heald
Cintas Corporation
Cleveland Electric Illum
Cleveland Pneumatic
Clovis School District
Coldwater Comm Schools
Colorado Gas Company
Columbia Gas Distrib
Columbia Gas System
Combustion Engineering Inc
Commodore International
Commonwealth Edison
Compuserve Inc
Comsat Laboratories
Congoleum Corporation
Consolidated Edison
Consumers Power Company
Container Sales Corporation
Continental Grain Co
Control Data Corporation
Cooper Industries
Coopers & Lybrand
Cordis Corporation
Corn Products
Corning Glass Works
Cozad City Schools
CPT Corporation
Cray Research Inc
Crocker National Bank
Crowe Chizek & Co
Cubic Corporation

-D-

Danielson & Schultz
Danners Inc
Dart & Kraft Inc
Davidson County Sch District
Davisons
Daytons
DEC Inc
Dekalb-Pfizer Genetics
Denver The
Desoto Inc
Detroit Edison
Detroit Police Department
Detroit Public Schools
Diebold Inc
Digital Equipment Corporation
Dinner Bell Foods
Douglas M Cross & Company
Dow Chemical USA
Dresser Atlas
Dugan & Meyers Company
Duquense Light Company
Durametallic Corporation

-E-

E & J Gallo Winery
E G & G Idaho Inc
E I Dupont De Nemours
Eaton Corporation
Eau Claire School District
Ebasco Services Inc

Edison Brothers Shoe
Education Testing Service
E G & G Wash Anayl Service
Elec Data Systems Corporation
Elec Systems Division
Eli Lilly & Company
Emerson Electric Company
Empire Dist Elec Company
Environmental Care Inc
Equibank
Ernst & Whinney
Escambia School Board
Eugene Public Schools
Excel Corporation
Extel Corporation
Exxon Corporation USA

-F-

Fairchild Industries
Falk Corporation
Famous Barr Company
Far West Services
Farm Bureau Services
Farm Credit Administration
Federal Reserve Sy Board of Gov
Federal Deposit Insurance
Federal Highway Administration
Federal Land Bank
Federal Mogul Corporation
Fermi National Accel Lab
Firestone Tire & Rubber
First American Bank
First Bank Systems Inc
First Bank Minneapolis
First City Bank Dallas
First Federal Savings Detroit
First Interstate Bank
First National Bank Boston
First National Bank Cincinnati
First National Bank Commerce
First National Bank Oregon
Fisher Controls International
Fluor Mining Inc
FMC Corporation
FMC-Northern Division
Foleys Department Stores
Ford Elec & Refridg
Ford Motor Company
Foremost Foods Company
Formation Inc
Fort Dodge Comm School District
Fort Worth National Bank
Fremont Public Schools
Fresh Air Society
Frito-Lay Inc
Fundimensions

-G-

General Dyn-Data Systems Ser
General Electric Credit
General Electric Company
General Mills Inc
General Mills Restaurant Group
General Motors Corporation
General Motors Delco Elect
General Motors/Electr Division
Genrad Inc
Geological Survey
Georgetown City School District
Georgia-Pacific Corporation
Gilbert Commonwealth
Gillette Co
Gimbels Midwest
Glenridge Properties
Glova Public Sch
Gold Kist Inc
Goldsmith Dept Stre
Good Year Atomic Cor
Goodyear Tire & Rubr
GPU Service Corp
Grafton St School
Grand Forks PS
Grand Ledge Pub Schs
Great Lakes Progressive
Social Security
Great Wst Life Assur
GTE Corp
Guardian Industries
Guardsmark Inc
Gulf Oil Corp

-H-

H P Hood Inc
Haggar Co
Halliburton Services
Hallmark Cards Inc
Hamilton Tech Inc
Hamilton Twnshp PS
Hardin County S D
Harris Corp
Harris Corp Bindery
Harrison Co S D
Havi Corp
Hawaii Dept of Educ
Health Co
Hendrix & Dail Inc
Henry Ford Hospital
Hercules Inc
Herman Maclean & Co
Higbee Co
Highlands County Sch
Hitachi Magnetics
Honeywell/Sys & Res
Hooker Chem Co
Hoover Co
Horton Nurseries
Host Enterprise Inc
Howmet Corp
Howmet Turbine Corp
HRB Singer Inc
Huntington Alloys
Hurley Medical Ctr
Hyatt Hotel Corp
Hygrade Food Prod

-I-

IBM Corp
IC Industries Inc
Idaho First Natl Bnk
Illinois Bell Tele
Illinois Envir Prot
Illinois Farm Bureau
Imed Corporation
Impell Corporation
Indiana & Mi Elec Co
Indiana Farm Bureau
Indiana Natl Bank
Information Assoc Inc
Information Intl
Ingersoll-Rand Co
Ingham Cnty Coop Ext
Inland Container
Inland Steel Co
Intel Magnetics
Intl Harvester
Intl Minerals & Chem
Intl Res & Dev Corp
Intl Voluntary Serv
ITT Aerospace Opt Div

-J-

J A Jones Construct
J Byrons Dept Store
J Hancock Companies
J Hancock Mut Life
J L Hudson Co
J Riggins Inc
J Walter Thompson Co
Jackson Pub Schls
Jacobson Stores Inc
Jeld-Wen Inc
Jenison Pub Schls
Jervis B Webb Co
Jet Propulsion Lab
Johnson Controls Inc
Johnson Products Inc

-K-

Kalamazoo Sch Dist
Kaman Sciences Corp
Kansas City PS
Kansas Dept of Trans
Kansas Div of Pers
Kansas Gas & Elect
KCL Corporation
Keithley Instruments
Kellogg Company
Kendall Company
Kenner Prod
Kent Cnty PS
Kern High Sch Dist

Key State Bank
Kobacker Stores Inc
Koch Refining
Kohler Co

-L-

Lake Forest Sch #67
Lakewood Public Schls
Lansing Board Water & Light
Lansing General Hospital
Laventhol & Horwath
Lear Siegler Inc
Lettuce Ent You
Levy Corporation
Lincoln Pub Schls
Lincoln Telephone
Litton Indust Prod
Lockheed Missiles
Long Beach USD
Loral Electronic Systems
Lutron Electronics

-M-

M D Anderson Hospital
Macys Midwest
Madison Cnty Board
of Education
Maner Costerisan & Ellis
Manufacturers Hanover Trust
Manville Corporation
Marathon Oil Co
Marine Natl Exchange Bank
Markem Corp
Marquis Hotels & Restaurant
Marsh Products
Martin Marietta Aero
Mason County Comm Schls
Masonite Corp
Material Serv Corp
May Company
Maytag Co
McAllen Indep Schls
McCulloch
McDonnell Douglas
McGladrey Hendrickson
McGraw-Edison Co
McNeil Pharmaceutical
Mead Corp
Mead Johnson & Co
Mech Technology Inc
Meijer Thrifty Acres
Merchantile Stores Co
Merck & Co Inc
Mercy Memorial Hosp
Metcalf & Eddy Inc
Metro Edison Co
Mich Auditor Gen
Mich Bell Tele Co
Mich Dept of Trans
Mich Mutual Insur
Michigan City Area S
Midland Pub Schs
Midway Motor Lodge
Milford Pub Schools
Millard Pub Schls
Millhouse & Holaly
Milwaukee Boston Str
3M Company
Milwaukee Pub Schls
Minn Mut life Ins Co
Missouri Hwy & Trans
Mobil Oil Corp
Molex Inc
Monroe Pub Schls
Montgomery Ward & Co
Moore Products Co
Moore-Gardner Assoc
Morrison Inc
Morse Chain Div
Mostek Corp
Motor Wheel Corp
Murray State Univ

-N-

Natick PS
National Bank of Detroit
National City Bank
National Cred Un Adm
National Gypsum Co
National Science Foundation
Natl Bank Commerce

Natl Fed of Fed Empl
Natl Semiconductor
Natrona Cty SD 1
Naval Civil Pers Com
Naval Weapons Center
Neiman-Marcus
Nestle Co Inc, The
New Jersey Bell
New York Tele Co
Niagara Mohawk Power Co
Nichols Research
NJ Dept Civil Serv
No Amer Life Health
Norfolk & Wstrn Rail
Norfolf City Schls
North Amer Van Lines
Northern Ind Pub Ser
Northern Natural Gas
Northern Telecom Sys
Northrop Corp
Northrup King Seed C
Northwest Energy Co
Northwestern Bell
Nutech Engineers

-O-

Oak Pk Rvr Forest HS
Office of Adjutant General
Ohio Edison Co
Olin Corporation
Omaha Pub Pwr Dist
Omark Industries
Oscar Mayer & Co
Osco Drug Inc
Otsego Public Schls
Ottumwa Comm Sch Dis
Owens Corning Fibr
Owosso Public Schls

-P-

P H Glatfelter Co
Pacific Gas & Elec
Pacific NW Bell
Pacific Western Bank
Panduit Corp
Paper Convert Machin
Parker Wittus
Peabody Coal Co
Peace Corps
Penn Civ Serv Comm
Penn Power Light Co
Perkin Comm HS
Petoskey Pub Schls
Pfizer Inc
Philip Morris USA
Phoenix Mutual
Pittsburgh Natl Bank
Planning Research Co
Planning Rsrch Corp
Plante and Moran
Plaquemines Parish
Pollack Corp
Pomeroys Levittown
Pontiac Sch Dist
PPG Industries Inc
Pratt & Whitney Airc
Precision Monolithic
Prestolite Elec Div
Prestolite Motor Div
Price Waterhouse
Prince George Cty PS
Prince Wm County Sch
Procon Int'l Inc
Procter & Gamble
Provident Life Ins
Prudential Ins Co Am
Public Serv Colorado
Public Serv Indiana
Pullman Swindell
Purex Corp

-R-

Radisson Hotel
Rand Corp
Rapid City Area Schl
Rauland Div Zenith
Rehmann Robson Osbur
Reliance Electric Co
Res Triangle Inst
Rexham Corp
Reynolds Metal Co

Richardson-Gordon
River Valley Sch
Rochester City SD
Rochester Tele Corp
Rockwell Intl
Rocky River Sch Dist
Rogers Corp
Rusnack Incorporated

-S-

S Grumbacher & Son
Saga Corp
Saginaw Co Ment Hlth
Saginaw Pub Schs
Saint John Hosp
San Diego Gas & Elec
San Felipe Del Rio
Sandia National Labs
Sangamo Weston Inc
Santa Ana USD
Santa Fe Railway Co
Santa Fe Schl Dist
Schippers Kintner Ro
Sci Systems
Scovill Inc
Scranton SD
Searle Chemicals Inc
Seattle Frst Natl Bk
Second Natl Bank
Sentry Insur Corp
Shaker Hts City Schl
Shelby Mutual Ins
Shell Companies
Shillitos/Rikes
Siemens Allis Inc
Singer/Link Flig Sim
Smithsonian Institute
Sky Chefs Inc
SMS
South Redford Schls
South Texas ISD
Southeastern MI Gas
Southern New Eng Tel
Southwest Research
Sparton Corp
Sperry New Holland
Sprague Electric Co
Spring Branch ISD
Spring Independent S
Springfield Pub Schl
SPS Technologies
St Louis Cnty Water
St Mary's Hospital
Standard Oil Co Ohio
Stanley Consultants
State Mutual Life In
Steelcase Inc
Stepan Company
Sterling Winthrop
Sun Company Inc
Sundstrand Adv Tech
Sybra, Inc
Sykes Datatronics
Systems Research Inc

-T-

Tacoma Pub Sch
Technicare Corp
Tektronix Inc
Tenneco Inc
Tennessee Eastman
Tennessee Valley Auth
Texas Oil & Gas Corp
The Broadway
The Transition Team
Timken Company
Topeka Shawnee D-501
Touche Ross & Co
Trane Co
Tucson Unified S D 1
Turner Construction

-U-

U S General Acct Off
U S Geological Survey
U S Marine Corps
U S Nat Ocean & Atom
Uarco Incorporated
UNC Nuclear Ind
Union Carbide Corp

Union Electric Co
Uniroyal Tire Co
United Illuminating
United Tech Corp
United Technologies
Univ of Texas
Univac Data Proc Div
Universal Steel-Mich
Upshur Co S D
US Air Force
US Army Intel/Securi
US Corp of Engineers
US Dept of Commerce
US Dept Health Educ
US Dept of Energy
US Dept of Justice
US Fed Highway Admin
US Fire Ins Cos
US Marine Corps
US Nat Endow For Hum
US Nat Ocn & Atm Adm
US Natl Secur Agency
US Naval Avionic Ctr
US Naval Weapons Sta
US Navy
US Nvl Shp Wea Sy En
US Nvl Weapon Supprt
US Peace Corps
US Small Bus Adminis

-V-

Vallen Corp
Valley Natl Bnk Ariz
Valmont Industries
Verbatim Corp
Vermeer Manufng Co
Vick Research & Deve
Vidosh Bros
Vitro Laboratories
Volkswagen of Amer

-W-

W Aurora Schl Dist
W H Brady Co
W W Grainger Inc
Wachovia Bk & Trst
Wanamaker±s
Warwick Schools
Warren Consl Schls
Wash State Dept Pers
Waterford Schls
Wausau Insurance Cos
West Co Inc
Western Geophysical
Western Publishing
Westin Hotels
Weyerhaeuser Co
Wheeling Comm SD
Wickes Lumber Co
Wilcox Flectric Inc
Wilson Foods Corp
Wilson Sporting Gds
Winkelman Stores Inc
Wis Electric Power
Wis Power & Light
Wis Public Serv
Wisconsin Dept Trans
Wolverine Aluminum
Wolverine Worldwide
Wyandotte Pub Schls
Wyatt Cafeterias

-X-

Xerox Corp

-Y-

Yeo and Yeo

-Z-

Zelenka Evergrn Nurs
Zurich-Amer Ins Cos